

GRADE  
173

ALLEN

FIELD BOOK

No. 385

*Indexed Complete 3-20-35.*  
*C.S.K.*

Our Leather Bound Engineers Note Books are carried in the following rulings:

- No. 380 LEVEL BOOK. Left and Right Hand Page the same as Left Hand Page of this Book.
- No. 382 FIELD BOOK. Left Hand Page as in this Book, Right Hand Page 4 x 4 to the inch, Center Line Red.
- No. 384 MINING TRANSIT BOOK. Left Hand Page as in this Book, Right Hand Page 8x8 to the inch, Center Line Red.
- No. 385 FIELD BOOK. Left Hand Page as in this Book, Right Hand Page 8 vertical and 4 horizontal lines to the inch, Center Line Red.

We also carry the Note Books listed above, bound in extra strong Fabri-Hide (otherwise the same quality of book), which can be furnished at a somewhat lower price.

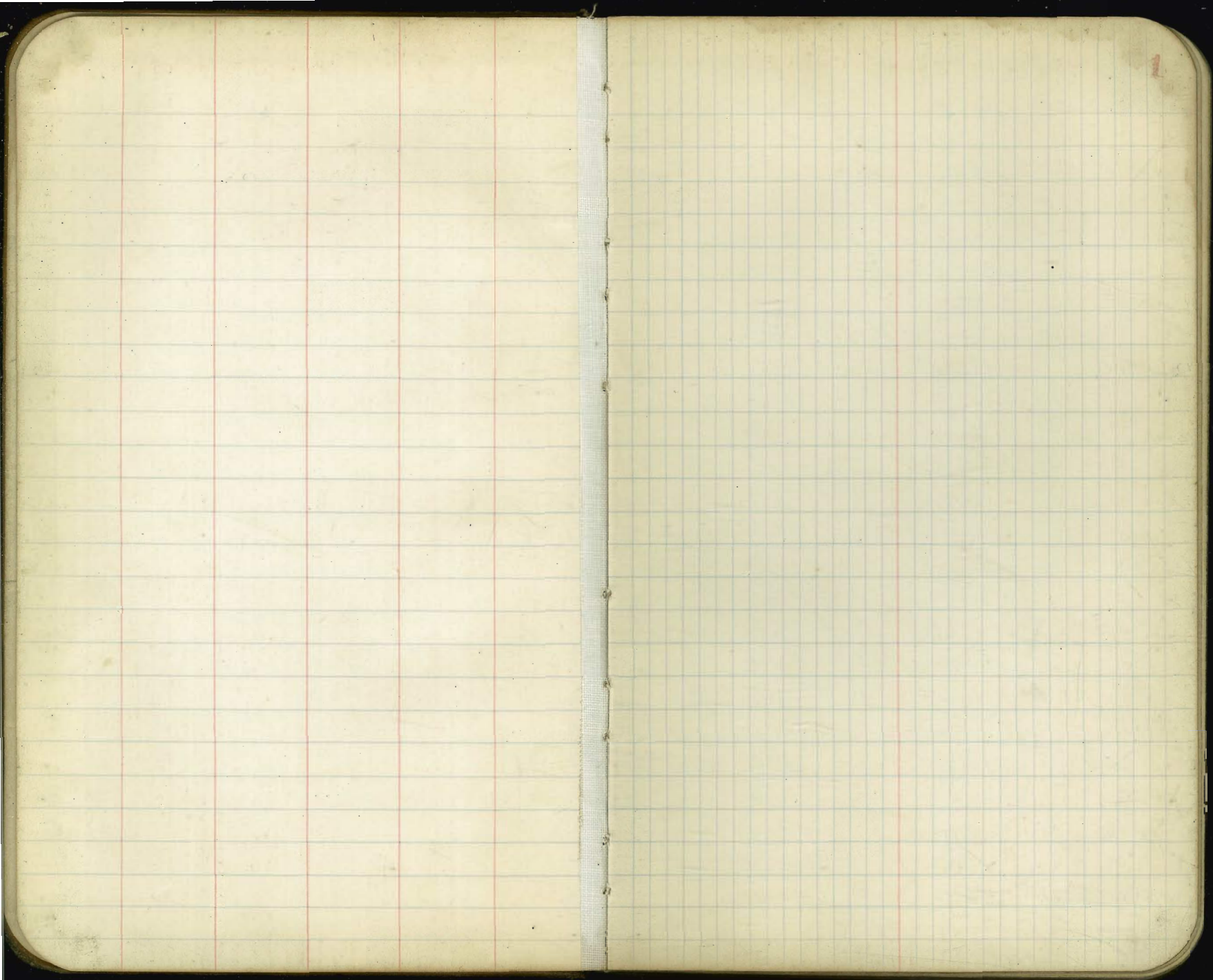
In ordering Fabri-Hide covered books, add the letter "F" to catalog number.

**THE FREDERICK POST CO.**  
*ENGINEERING and DRAFTING SUPPLIES*  
IRVING PARK STATION  
CHICAGO, ILL.

MICROFILMED

APR 9 1965

92  
15  
7  
16



1104<sup>d</sup> Grades Alley Brk R14 Univ Hqts. 5/15/30  
 Bet Essey + Robinson.

6.22

2

Indexed  
 C.S.K

S. Line

N. Line

00 = E. Line 10<sup>th</sup>

	$\begin{array}{r} 282.91 \\ 7.54 \\ 7.53 \\ 6.21 \\ 6.21 \\ \hline \end{array}$	$\begin{array}{r} RM SW \\ Essey + \\ Vermont. \\ \hline \end{array}$	$\begin{array}{r} 282.98 \\ 7.77 \\ 7.45 \\ 6.17 \\ 6.12 \\ \hline \end{array}$
0+40	$\begin{array}{r} 83.50 \\ 5.62 \\ 3.65 \\ +1.97 \\ \hline \end{array}$	$\begin{array}{r} 287.94 \\ 4.47 \\ 292.45 \\ 7.05 \\ 285.40 \\ 3.72 \\ 289.12 \\ \hline \end{array}$	$\begin{array}{r} 83.51 \\ 5.61 \\ 4.97 \\ +0.67 \\ \hline \end{array}$
0+80	$\begin{array}{r} 84.10 \\ 5.02 \\ 4.98 \\ +0.64 \\ \hline \end{array}$	$\begin{array}{r} 289.12 \\ 5.04 \\ 5.03 \\ +0.05 \\ \hline \end{array}$	$\begin{array}{r} 84.04 \\ 5.04 \\ 5.03 \\ +0.05 \\ \hline \end{array}$
1+20	$\begin{array}{r} 84.70 \\ 4.42 \\ 4.15 \\ +0.27 \\ \hline \end{array}$		$\begin{array}{r} 84.57 \\ 4.55 \\ 4.50 \\ +0.05 \\ \hline \end{array}$
1+60 Brk	$\begin{array}{r} 285.30 \\ 7.15 \\ 7.15 \\ 0.00 \\ \hline \end{array}$		$\begin{array}{r} 285.10 \\ 4.02 \\ 3.72 \\ +0.30 \\ \hline \end{array}$
2+00	$\begin{array}{r} 85.53 \\ 6.92 \\ 6.75 \\ -0.03 \\ \hline \end{array}$		$\begin{array}{r} 85.40 \\ 7.05 \\ 6.05 \\ +1.00 \\ \hline \end{array}$
2+40	$\begin{array}{r} 85.76 \\ 6.69 \\ 7.00 \\ -0.31 \\ \hline \end{array}$		$\begin{array}{r} 85.70 \\ 6.75 \\ 6.82 \\ -0.07 \\ \hline \end{array}$
2+80 Brk 4.47	$\begin{array}{r} 286.00 \\ 6.45 \\ 6.57 \\ -0.12 \\ \hline \end{array}$		$\begin{array}{r} 286.00 \\ 6.45 \\ 6.15 \\ +0.30 \\ \hline \end{array}$
3+26 <sup>47</sup>	$\begin{array}{r} 86.43 \\ 6.02 \\ 6.07 \\ -0.05 \\ \hline \end{array}$		$\begin{array}{r} 86.43 \\ 6.02 \\ 5.06 \\ +0.96 \\ \hline \end{array}$
33			
3+73	$\begin{array}{r} 86.86 \\ 5.59 \\ 4.87 \\ +0.72 \\ \hline \end{array}$		$\begin{array}{r} 86.86 \\ 5.59 \\ 4.59 \\ +1.00 \\ \hline \end{array}$
4+20 Brk	$\begin{array}{r} 287.30 \\ 5.15 \\ 4.15 \\ +1.00 \\ \hline \end{array}$		$\begin{array}{r} 287.30 \\ 5.15 \\ 4.85 \\ +0.30 \\ \hline \end{array}$
4+50	$\begin{array}{r} 87.40 \\ 5.05 \\ 4.20 \\ +0.85 \\ \hline \end{array}$		$\begin{array}{r} 87.43 \\ 5.01 \\ 4.79 \\ +0.23 \\ \hline \end{array}$
4+80 W. Line Vermont	$\begin{array}{r} 287.51 \\ 4.94 \\ 4.95 \\ \hline \end{array}$		$\begin{array}{r} 287.57 \\ 4.88 \\ 4.88 \\ \hline \end{array}$

Watson Station

Grades Alley BIK. 6 Crittendens

5/13/30

Indexed  
C.S.A.

Bet 7th & 8th

W. Line

E. Line

W. Line

E. Line

00 S. Line Univ

284.57  
4.18  
4.15

284.61  
4.14  
4.13

4+ 45 N. Line Robinson

275.97  
77  
6.22  
6.27

275.82  
6.37  
2.40

B.M. 8th  
+ Univ. MN.

0+ 40 Brk

283.30  
5.75  
4.45  
+1.00

284.38  
4.37  
288.75  
6.34

283.20  
5.58  
5.12  
+0.43

0+ 60 Brk

282.80  
5.95  
5.06  
+0.89

282.41  
3.54  
285.75  
5.35

282.65  
6.10  
5.10  
+1.00

0+ 80 Brk

282.50  
3.45  
2.60  
+0.85

284.34  
4.34  
6.12  
278.87  
3.37

282.30  
6.45  
5.45  
+1.00

1+ 20

82.06  
3.89  
7.00  
-0.11

282.19  
6.32  
275.87  
4.66  
280.53

81.94  
4.01  
3.01  
+1.00

6.28  
6  
5.68

1+ 60

81.63  
4.32  
4.12  
+0.20

81.57  
4.38  
3.38  
+1.00

2+ 00 Brk

281.20  
4.75  
4.25  
+0.50

281.20  
4.75  
4.50  
+0.25

2+ 50

80.55  
4.37  
4.07  
+0.32

80.45  
4.49  
3.72  
+0.57

3+ 00 Brk

279.90  
5.04  
4.04  
+1.00

279.70  
5.24  
4.24  
+1.00

3+ 40

79.18  
5.76  
4.76  
+1.00

78.98  
5.96  
4.48  
+1.48

3+ 80 Brk

278.46  
6.48  
4.48  
+2.00

278.26  
6.68  
5.68  
+1.00

4+ 00 Brk

277.95  
4.24  
3.93  
0.31

277.76  
4.43  
2.36  
+2.07

4+ 20 Brk

277.15  
5.04  
4.32  
+0.72

276.94  
5.21  
3.99  
+1.22

Watson Sultan

Grades Alley Bk I Hatadena 15 Wld 5/15/30

Indexed  
C.S.P.

Bt Faltant Gregory.

4

	W. Line	E. Line
00+5 Line Thorn	318.72 H.O.C. 5.10 5.10 5.10 3.74 3.88	318.80 5.02 4.94 3.86 3.82
0+40 B+k	318.20 4.46 4.20 +0.26	318.20 4.46 4.10 +0.36
0+70	17.80 4.86 4.16 0.70	17.80 4.86 4.73 +0.13
1+40	17.39 5.27 5.18 +0.07	17.39 5.27 4.72 +0.55
1+90	16.98 5.68 5.38 +0.30	16.98 5.68 5.68 6.00
2+40	16.58 6.08 5.57 +0.51	16.58 6.08 5.94 +0.14
2+90	16.18 4.70 3.22 +1.48	16.18 6.48 6.01 +0.47
3+40	15.78 5.10 3.85 +1.25	15.78 5.10 4.93 +0.17
3+90	15.37 5.51 4.51 +1.00	15.37 5.51 5.25 +0.26
4+40	14.97 5.71 4.25 +1.66	14.97 5.71 5.66 +0.25
4+90	14.56 6.32 4.85 +1.47	14.56 6.32 6.06 +0.26
5+40 B+k	314.16 6.72 6.55 +0.17	314.16 6.72 6.56 +0.16
5+60	313.99 6.87 6.32 +0.57	313.95 6.93 6.93 0.00

5+80 B+k

W. Line

E. Line

313.80  
7.08  
6.58  
+0.50

313.64  
7.24  
6.91  
+0.33

6+00 W. Line Redwood

313.59  
7.29  
7.29

313.28  
7.60  
7.59

②

Sewer Laterals

①

313.10  
7.56  
5.88  
+3.68

314.80  
7.86  
3.56  
+4.30

Dennis  
Indexed  
C.S.K.

11/54 Grading Paving Etc  
Kettner to California

5/17/30

B.M. 30.00 N.W. Kettner Hawthorn

	N. ch	gutter	dr	gutter	side	Waterline
00-N.W. Kettner	28.00	27.35	29.14	27.42 <u>27.59</u>	28.00	6.95 24.00 <u>2.7</u> 25.3
	14.93 <u>6.92</u>	7.58 <u>7.60</u>		7.51 Pavmt	6.87	
0+20		25.82	26.65	25.82		
0+24		25.59		25.59		
0+35	25.94 9.0 8.4 <u>+0.6</u>				25.94 9.0 7.4 <u>+1.6</u>	23.2 11.7 7.4 <u>+4.3</u>
0+50		24.39		24.39		
0+70	23.88 11.0 9.8 <u>+1.8</u>			23.88 11.0 10.5 <u>+0.5</u>		21.1 13.8 9.7 <u>+4.1</u>
1+05	21.82 13.1 11.1 <u>+2.0</u>			21.82 5.3 6.5 <u>+1.2</u>		19.0 15.9 11.8 <u>+4.1</u>
1+40	19.76 7.3 4.9 <u>+2.4</u>			19.76 7.3 7.8 <u>+0.5</u>		16.8 10.3 6.6 <u>+3.7</u>
1+75 End. 1	17.70 9.4 8.1 <u>+1.3</u>	17.03	17.53	17.03	17.70 9.4 9.9 <u>+0.5</u>	17.3 2.8 14.7 12.4 <u>+2.3</u>

4.93  
34.93  
12.25  
22.68  
4.43  
27.11

5

chk.

19.0

8.1

9.0

+4.1

Date

Meade Ave Paring  
Park Blvd to Louisiana  
Water Grades.

5/17/30

Indexed  
c.s.k.

BM

Park Blvd.

Alabama

6

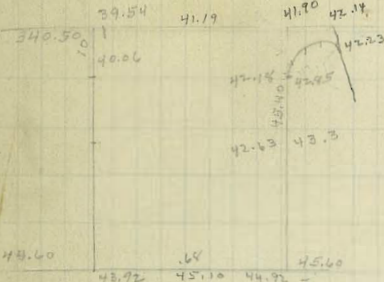
00. = E. Line Park

8.3  
40.9  
2.5  
38.4

2+60

74.1  
5.9  
3.7  
72.2

343.60  
343.58  
0.42  
344.00  
12.98



19.00	18.59	17.5	19.45	20.00
20'		20.64		
30'				
25'				
25'	24.33	25.21	25.06	26.0
25'				
26.40	25.73		26.54	27.38
	26.35		27.27	
27.54	26.91		27.87	28.54
	27.40		28.30	
28.57	27.95		28.77	29.46
	28.40		29.30	
29.84	28.73	29.59	29.52	30.17
30				
30		0.50		
30		21.85		
30		31.48		
31.00	31.36	31.46	31.75	31.5

0+50

39.1  
10.1  
3.2  
41.9

3+10

310 7.96  
310.00  
2.7  
307.3

331.02  
0.08  
331.10  
2.72

1+00

39.7  
9.5  
9.8  
41.7

318.38  
1.58  
319.96

1+50

40.3  
8.9  
7.3  
41.6

43.58  
5.62  
49.20

2+00

41.0  
8.2  
6.5  
41.7

2+50

41.7  
7.5  
6.1  
41.4

W. Line Georgia

3+00

4.3  
44.8  
2.5  
42.4

E. Line Georgia

0+00

43.8  
0.2

0+40 B

38.8  
5.2  
2.7  
42.5

0+80 B

36.3  
7.7  
5.5  
42.2

1+20 B

32.6  
11.4  
9.4  
42.0

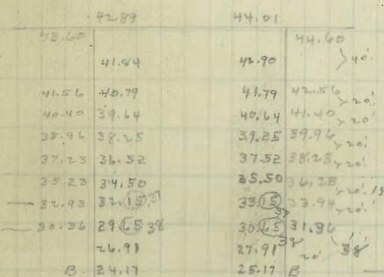
1+60 B

27.7  
3.4  
1.3

2+10

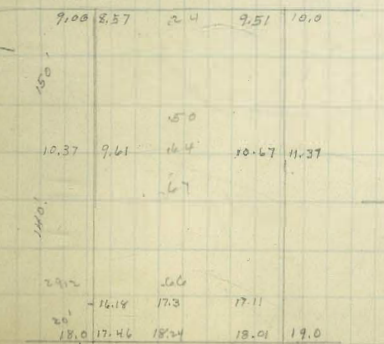
22.1  
20.9  
10.2  
8.0  
42.2

Georgia



MISSISSIPPI

Florida



Louisiana

Alabama



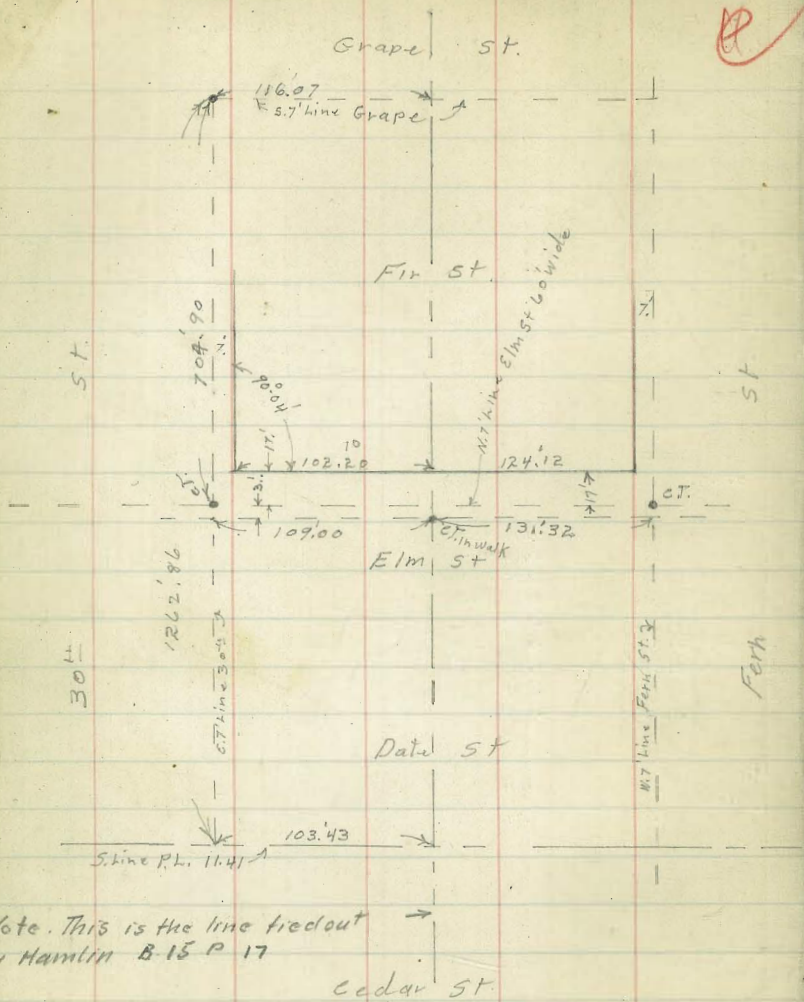
Survey of Ctr. P.L. 1141.

9-6-30

plotted on tie sheets  
C. S. K.

7

*(Handwritten mark)*



Note. This is the line tied out  
by Hamlin 8-15 P 17

Control  
Indexed  
C.S.K.

Alley BK 193 U.H. 5/29/30  
Center Lane  
culvert Grades  
Culvert 1

	306.90		Lowered to 304.40	
0+00 C.B. 7 D. Type Top Pavmt	2.80	304.10	304.30	- 0.20
0+00 F.L.	2.40	304.10	301.60	+ 2.50
0+34 Lug F.L.	3.85	303.05	299.00	+ 4.05

Culvert #2

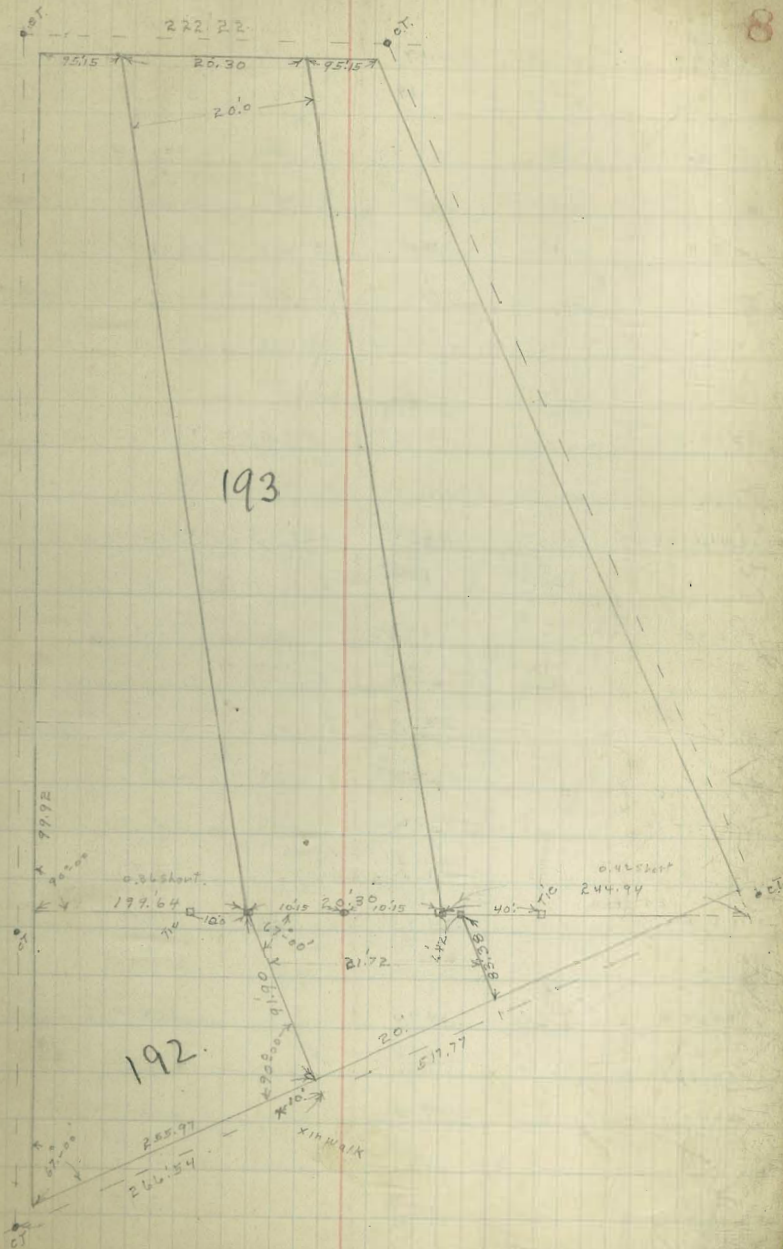
Intake				
0+00 E. End F.L.	5.46	301.44	299.60	+ 1.84
0+17 Lug F.L.	3.85	303.05	299.00	+ 4.05
0+40 Brk F.L.	7.03	299.87	298.20	+ 1.67
0+60 W. End Outlet F.L.	7.72	299.18	298.00	+ 1.18

Wall

0+00 3' N. of N. Line Univ Base	1.95	11.24	302.00	+ 9.24 ✓
0+00 Top	1.95	11.24	304.90	+ 6.34 ✓
0+7 Base to 5	4.95	8.24	302.00	+ 6.24 ✓
0+7 " " N.	4.95	8.24	299.00	+ 9.24 ✓
0+37 Base	9.33	3.86	299.00	+ 4.86 ✓
0+37 Top	9.33	3.86	302.80	+ 1.06 ✓

317.19		Sewer laterals		
7.33	#1 4"	#2 6"	#3 6"	#4 4"
308.86				
3.04				
306.90	317.00	312.60	299.16	301.75
				297.56
				7.34
				5.19
				+ 4.15

Lincoln Ave



Alley Grades BIK 193 LH  
Centre Lane

5/21/30

N.W. Centre  
+ Univ Ave

B.M.	10.29	314.17		303.88
	2.85	313.19	2.83	310.34
		E. Line	±	W. Line
0+0 N. of Univ		309.74	309.74	309.45
		3.45	3.45	3.74
		3.27	3.50	3.68
0+3.5		310.05	310.00	309.70
0+7.0		310.10	310.05	309.90
0+10.5		310.15	309.85	309.85
0+14.0	el.			
0+00 N. of Univ	311.14	309.95	309.65	309.65
	2.05	3.20	3.54	3.71
	3.83	2.89	2.84	2.54
	-0.48	+0.77	+0.70	-0.30
0+30	366.90	308.17	307.97	
	0.49			
	306.41			
	4.45	11.0 out	+1.3	
	310.86	To Top slope	6.0	
			-7.3	
0+60		306.30	306.30	306.30
		8.4	0.60	9.9 to Top
		To Top	6.2	Slope
		Slope	-5.6	
0+91.2 E				
0+83.2 W	N. line Blanc	305.22	305.09	
		5.64	5.77	
		7.86	10.10	
		-2.02	-4.33	
19.81 E } Brk 0+00		304.80	304.80	
16.31 W }		6.06	6.06	
		9.12	10.11	
		-2.06	-4.05	
0+20 B		304.70	304.70	
		6.06	6.16	
		7.58	8.68	
		-1.42	-2.50	
0+40 B		305.10	305.10	
		5.76	5.76	
		7.03	6.96	
		-1.27	-1.20	
0+75		6.05	5.95	
		4.81	4.91	
		5.66	3.91	
		-0.85	+1.00	

E. Line

W. Line

1+10 Brk	307.00	306.80	310.86
	3.36	4.06	1.95
	1.75	4.33	308.91
	+2.11	-0.27	10.13
1+60	8.55	8.35	319.04
	2.31	2.51	2.64
	1.31	1.51	316.40
	+1.00	+1.00	8.91
			325.31
2+10	10.10	9.90	2.07
	8.94	9.14	323.24
	7.94	9.14	8.54
	+1.00	0.0	331.78
2+60	11.65	11.45	
	7.39	7.59	
	6.39	8.06	
	+1.00	-0.47	
3+10 Brk	313.20	313.00	
	5.84	6.04	
	5.49	4.04	
	+0.35	+2.00	
3+50	14.63	14.40	
	4.41	4.64	
	3.97	4.12	
	+0.44	+0.50	
3+90	16.07	15.80	
	9.24	3.24	
	8.82	2.90	
	+0.42	+0.34	
4+30 Brk	317.50	317.20	
	7.81	8.11	
	7.67	7.43	
	+0.14	+0.68	
4+85	20.85	20.55	
	4.46	4.76	
	3.56	4.05	
	+0.90	+0.71	
5+40 Brk	324.20	323.90	
	7.58	1.41	
	7.09	2.07	
	+0.49	-0.66	
5+90.0 } Skins line (N)	328.30	328.12	
5+93.5 W }	3.48	3.66	
	3.50	3.66	



Indexed  
c.s.k.

Alley Brk 177 Horton's Add.  
" " 6 Culverwells Add.

14<sup>th</sup> to 15<sup>th</sup> Bet. E & F.

53.37

N. 10

B.M.	E. line	S. line	N.W. 14 <sup>th</sup> & E. Sts
0+00 14 <sup>th</sup> St	49.55	49.53	49.39
	50.95	4.87	49.86
	3.45		4.54
	54.40		
0+20 Brk	49.57	49.90	49.49
	4.80	4.50	49.93
	3.80	3.50	4.47
	53.37	+1.00	4.64 edge approx
0+40 Brk		50.00	49.60
		4.40	50.00
		3.40	4.40
		+1.00	4.64 edge approx
	49.93		
	4.37		
0+70	54.30	49.85	49.45
		4.55	49.85
		4.05	4.55
		+0.50	4.64 edge
1+00 Brk		49.70	49.30
		4.70	49.70
		3.70	4.70
		+1.00	4.65 edge approx
1+50		49.30	49.30
		4.07	5.10
		4.25	4.10
		-0.18	+1.00
2+00 Brk		48.90	48.90
		4.47	4.47
		3.47	3.47
		+1.00	+1.00
2+40		48.65	48.70
		4.72	4.67
		3.72	3.67
		+1.00	+1.00
2+80		48.40	48.50
		4.97	4.87
		3.97	3.87
		+1.00	+1.00
3+20		48.15	48.30
		5.22	5.07
		4.22	4.02
		+1.00	+1.00
3+60 Brk		47.90	48.10
		5.47	5.27
		4.27	4.27
		+1.00	+1.00

3+70 Brk	47.75	47.95
	5.62	5.62
	4.62	4.86
	+1.00	+0.56
3+80 Brk	47.50	47.70
	5.87	5.67
	4.87	4.67
	+1.00	+1.00
3+90 Brk	47.00	47.20
	6.37	6.17
	5.37	5.17
	+1.00	+1.00
4+00 N line 15 <sup>th</sup> St	46.52	46.38
	7.00	46.64
	7.03	6.73
		6.75

Dennis.

Mission Ave Paving etc

5-31-30

11

P.M. S.E. Geo + Mission

Curb,

Sewer Lateral #1

FL

344.18

335.7

330.30

1.97

10.45

15.85

346.15

10.45

10.45

+ 5.40

INDEXED

WIK

DEC 27 1948

Curb Cuts

Net 478.0  
7.35

42.70  
3.45  
3.40

Gutter 435.5  
2.60  
2.60

42.50  
2.65

43.33  
2.82

43.04  
3.11

42.03  
4.12

sid

43.52  
2.43  
2.20

43.00  
3.15  
3.19

42.85  
3.30  
3.59

41.90  
4.25  
4.42  
67

Curb Cuts

Gutter 42.55  
3.30  
3.30

42.33  
3.82

42.26

5.09

4.20 8.25  
67 4.87  
4.87 4.87  
87 4.87  
5.74 87  
6.41  
87  
7.28  
8.35

Carroll  
Indexed  
C.S.K.

Alleg BIK 53 Pavment.

7-7-30  
Miller  
H. H. H. H.  
C. H. H. H.  
Bliss

	N. Line	Water	E. Line	
002 S. Line Orange	351.70 6.65	48.8 7.5 6.6 +2.9 +3.9	351.70 6.65	351.20 7.15 358.35 5.51 352.84
0+20 B	352.60 5.75 5.00 +0.75	49.7 8.6 3.7 +4.9 +5.5	352.60 5.75 3.75 +2.00	4.24 357.08 5.99 351.09 4.60
0+40 B	352.90 5.45 5.15 +0.30	50.0 8.3 5.3 +3.0 +3.3	352.90 5.45 5.32 +0.13	355.69 4.91 350.78 5.15 355.93 5.82
0+60 B	352.80 4.28 4.18 +0.10	49.9 7.2 4.0 +3.2	352.80 4.28 4.03 +0.25	350.11 5.46 355.57
1+00	52.20 4.88 6.84	49.3 7.9 4.8 +3.0	52.20 4.88 4.76 +0.12	
1+40 B	351.60 5.48 5.51 -0.03	48.7 8.4 5.4 +3.0	351.60 5.48 5.41 +0.07	
1+60 B	351.50 5.58 5.74 -0.16	48.6 8.5 5.5 +3.0	351.50 5.58 5.50 +0.08	
2+13.2	51.35 5.73 6.12 -0.39	48.4 7.3 4.8 +2.5	51.35 4.34 4.82 -0.48	
2+67.8	51.20 4.49 5.02 -0.53	48.3 7.4 5.2 +2.2	51.20 4.49 5.19 -0.70	
3+21.2	51.05 4.64 4.77 -0.33	48.1 7.6 5.4 +2.2	51.05 4.64 5.39 -0.75	
3+75.5 B	350.90 5.03 4.88 +0.15	48.0 7.9 5.6 +2.3	350.90 5.03 5.64 -0.61	
4+23.2	51.03 4.90 1.82 +3.08	48.0 7.9 5.7 +2.2	51.03 4.90 5.72 -0.82	
4+71.2	51.17 4.76 4.53 +0.23	48.2 7.7 4.8 +2.9	51.17 4.76 4.84 -0.08	

5+20 B  
5+74

N. Line	E. Line
351.30 4.63 3.99 +0.64	48.4 7.5 4.9 +2.6
351.70 4.23 4.26 -0.03 low	48.6 .3 4.96 -0.03 low

12

51.70  
5.34  
51.30  
5.78

350.20  
4.95  
355.15

Sewer laterals

# 1 4"	# 2 6"	# 3 6"
346.15 9.00 5.00 +4.00	345.52 9.63 3.38 +6.25	348.57 9.78 6.61 +3.17

51.67  
3.48

culvert #1  
Moved R'N to Miss M.H. X  
002 Type D. Catch Basin 355.57

F.L.	Top C.B.
349.60 6.23 5.49 +0.74	50.70 5.23 5.49 -0.26

0+12 & E. Line Alley

5.37 350.20 grade 49.67 +0.53
--

0+57

5.85 349.72 grade 49.60 +0.12
--

1+03

5.52 350.05 grade 49.53 +0.52
--

1+48 outlet w. d. chamoune

349.45

Pavmt. Top of.  
6.12 5.54  
349.45 350.02

Con. on Page 14

Carroll  
Indexed  
C.S.K.

Alley BIK 26 Teralta

7-9-30

1211  
1211  
J.C. Blies

Dist. SW El Cajon  
& Marlborough

	W. Line	Water Line	E. Line
00: S. Line El Cajon	364.80 4.00 4.60		364.85 4.35 4.56
020 Bok	364.50 4.90 5.01 -0.11	61.5 7.9 2.9 +5.0	364.50 4.90 2.90 +2.0
1	64.35 5.05 5.30 -0.25	61.3 8.1 4.1 +4.0	64.35 5.05 4.05 +1.00
2	64.20 5.20 5.12 +0.08	61.2   +3.22	64.20 5.20 4.94 +0.22
3	64.05 5.35 5.32 +0.03	61.0 8.4 5.4 +3.0	64.05 5.35 5.41 -0.06
4	63.90 5.50 5.38 +0.12	60.9 8.5 5.6 +2.9	63.90 5.50 5.65 -0.15
5	63.75 4.78 4.51 +0.22	60.7 8.7 5.0 +3.7	63.75 5.65 5.02 +0.63
6	63.60 4.88 4.80 +0.58	60.6 8.7 5.0 +2.9	63.60 4.88 5.05 -0.17
7	63.45 5.03 5.07 -0.04	60.4 8.1 5.3 +2.7	63.45 5.03 5.33 -0.30
8	63.30 5.18 4.97 +0.21	60.3 8.2 4.2 +4.00	63.30 5.18 4.14 +1.10
9	63.15 5.33 3.51 +1.82	60.1 8.4 4.3 +4.1	63.15 5.33 4.33 +3.00
10	63.00 5.48 4.44 +1.00	60.0 8.3  +4.0	63.00 5.29 4.29 +1.00
11	62.85 5.63 5.24 +0.39	59.8 8.5 4.9 +3.6	62.85 5.44 4.92 +0.52

365.14

4.26

369.40

5.22

364.18

4.50

368.48

4.90

7.53

363.95

4.34

368.29

12: N. Line Orange

362.70

5.78

362.70

5.78

Sewer Lat ① 4"

358.40

10.08

5.25

+4.73

41.85

64.18



new orange +  
charcoal he

Alley BIK 53 Fairmont

Con. from Page 12  
Header CHK.

351.20  
4.62  
355.82  
5.15  
350.67  
4.22  
354.89

W	<u>51.70</u> 4.12	<u>52.60</u> 3.22	<u>52.90</u> 2.92	<u>52.80</u> 3.02	<u>52.20</u> 3.62	<u>51.60</u> 4.22	<u>51.50</u> 4.22	<u>51.35</u> 4.47	<u>51.20</u> 3.69
E	<u>51.70</u> 4.12	<u>52.60</u>	<u>52.90</u>	<u>52.80</u>	<u>52.20</u>	<u>51.60</u>	<u>51.50</u>	<u>51.35</u> 3.54	<u>51.20</u> ✓
W	<u>51.05</u> 3.84	<u>50.90</u> 3.99	<u>51.03</u> 3.84	<u>51.17</u> 3.72	<u>51.30</u> 3.59	<u>51.70</u> 3.19			
E	<u>51.05</u>	<u>50.90</u>	<u>51.03</u>	<u>51.17</u>	<u>51.30</u>	<u>51.50</u> 3.39			

Grades Alley 1311K, 245 U.H.

8-2-30  
mill  
Sommermeier  
Pierce

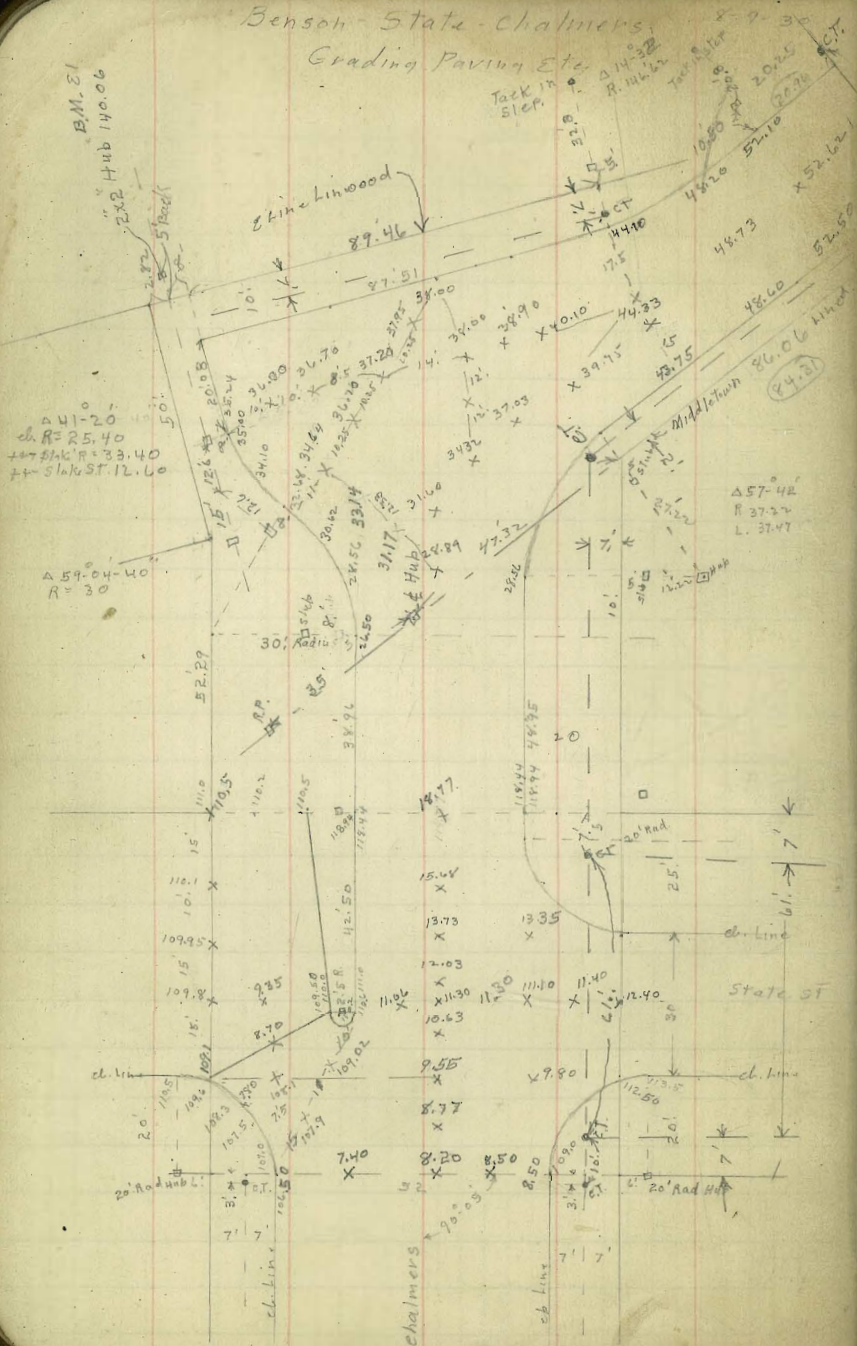
Indexed  
C.S.K.

	N & S Alley		W. Line	N.W. 40x2 Herbert	E & W. Alley	N. Line	5. Line 15
00=160' N. & U pas	293.40	292.87	293.15	289.95	00=W. Line N & S Alley	292.75	292.84
	4.95	5.48	5.29	8.40 298.35 5.65		4.92 4.46 +0.46	4.88 3.83 +1.00
0+34 2'	93.26		93.00	292.70	0+20 Brk	292.00	292.20
	5.09 4.09 +1.00		5.35 5.44 -0.09	4.97 297.67 6.54 291.13 4.09		5.67 5.26 +0.41	5.47 4.89 +0.58
0+69 83 Brk S. Line Alley	93.12		292.84	295.22	0+60	291.00	291.20 4.02
	5.23 4.23 +1.00		4.83 3.83 +1.00	5.16 290.06 2.72		4.22 3.44 +0.78	6.47 5.97 +0.50
0+89 83 Brk N. Line Alley	93.04		292.75	292.78	1+00	290.40	290.60
	4.63 3.95 +0.68		4.92 4.46 +0.46	9.60 283.18 4.73 287.91 11.82		4.82 3.41 +1.41	4.62 4.24 +0.38
1+00 Brk	293.00	292.50	292.70	276.09	1+35	290.10	290.20
	4.67 4.37 +0.30		4.97 4.29 +0.68	4.43 280.52		5.12 4.68 +0.44	5.02 4.73 +0.29
1+40	92.48		92.34		1+70	289.80	289.80
	5.19 4.58 +0.61		5.33 5.08 +0.25			5.42 5.42 0.00	5.42 4.45 +0.97
1+80 Brk	291.96	291.67	291.94		1+80	290.00	290.00
	5.71 5.89 +0.22		5.69 5.41 +0.28			2.78 3.92 -1.14	5.22 4.32 +1.00
2+00 Brk	291.60	291.30	291.60		2+07 25 N. End.	290.80	291.00
	6.07 5.74 +0.33		6.07 5.11 +0.96			4.42 5.04 -0.62	1.78 1.73 +0.05
2+20 Brk	290.90	290.50	290.70		Culvert 1	292.78	
	6.77 6.03 +0.74		6.97 5.10 +1.87		00 C.B. Top		{ 3.00 89.78 } +.33 stub
2+40 S. Line Myrtle	290.05	289.59	289.70	89.56	0+00 C.B. 9' Fl.		{ 2.05 70.73 } 289.45 { +1.28 Nail
90.24	7.62		7.97				{ 3.00 89.78 } +3.78 stub
					0+35	5.50	87.24 84.10 +3.14
Sewer lat #				283.9	0+70 A 13'-25'	287.91	8.97 83.81 82.18 +1.63
					1+02.5	290.52	5.06 82.85 80.40 +2.45
886.22			8.85		1+100 Brk } Prep		0.52 280.00 280.0 0.0
11.45			6.05		1+100 " }		0.52 280.0 275.0 45.0
4.37			14.90				
+7.08					1+49	4.17	76.35 273.40 +2.95
					1+52 24	14.70	273.21 273.20



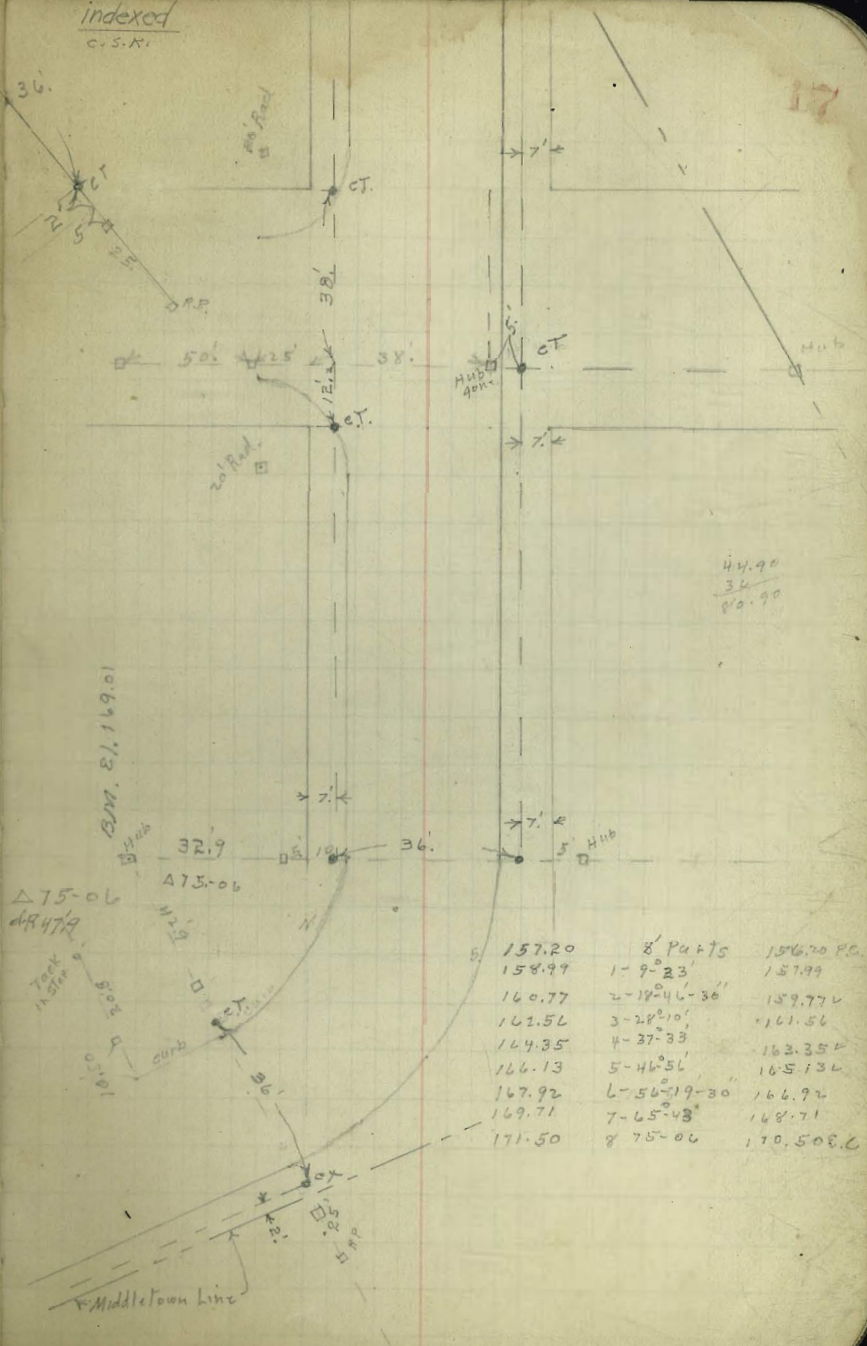
Benson State Chalmers

Grading Paving Etc



Indexed

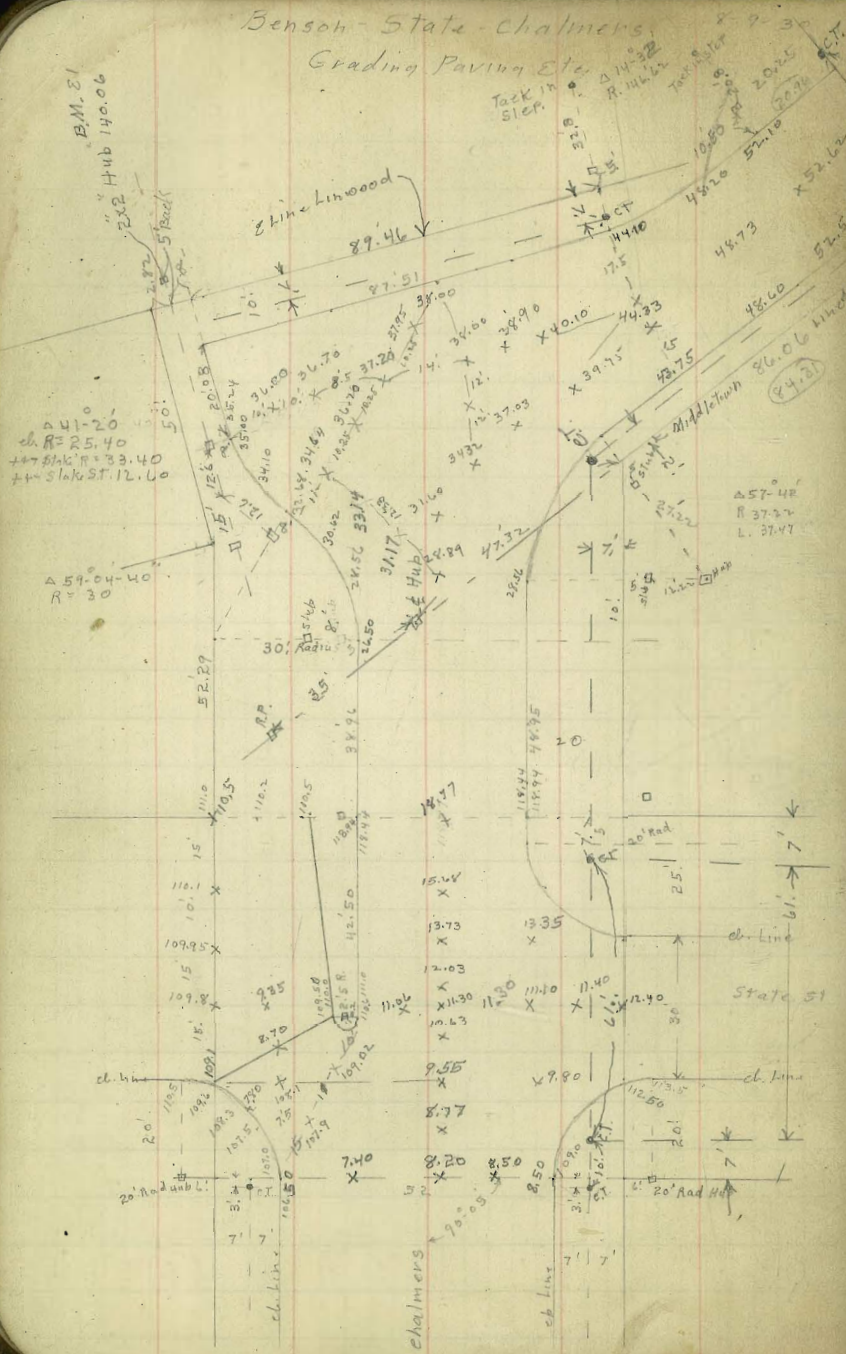
C.S.K.



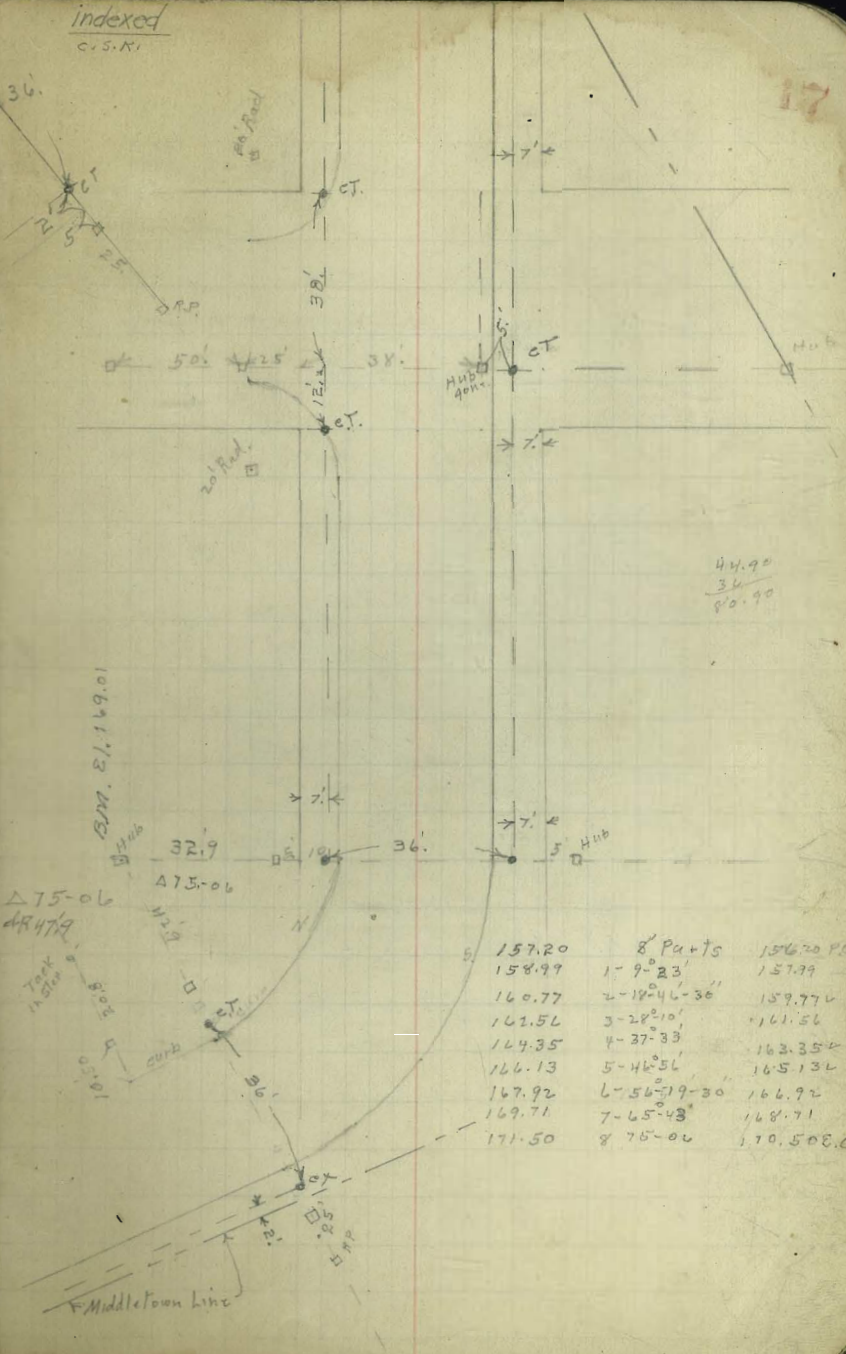
	8 Parts	156.70 P.C.
157.20		
158.99	1-9-23	157.99
160.77	2-18-46-36	159.77
162.56	3-28-10	161.56
164.35	4-27-33	163.35
166.13	5-46-56	165.13
167.92	6-56-19-30	166.92
169.71	7-65-43	168.71
171.50	8-75-06	170.50

Benson State Chalmers

Grading Paving Etc



Indexed  
C.S.K.



157.20	8 Parts	156.70 P.C.
158.99	1-9-23'	157.99
160.77	2-19-46-36"	159.77
161.56	3-28-10'	161.56
164.35	4-37-33"	163.35
166.13	5-46-56"	165.13
167.92	6-56-19-30"	166.92
169.71	7-65-43"	168.71
171.50	8-75-06"	170.50 P.C.

Chalmers  
State  
B.M. elr Mon

119.77  
15.08  
106.91 B.P. SW State + Chalmers

145.33  
5.27  
140.06 B.M. Chalmers + Linwood

	N.W.	W 2.5 RE	110.0	110.6	111.0	119.7	127.0	133.7
109.72	107.00	109.6	111.0	110.6	111.0	119.7	127.0	133.7
10.27	12.99	10.4	9.0	7.4	21.6	13.7	5.6	+0.5
119.99	13.02	12.6	6.9	10.0	7.4	10.9	3.9	1.4
0.22		-2.2	+2.1	0.0	-0.4	+10.7	+2.8	+2.6
119.77								
12.83								
132.60	109.00	112.5	113.3		118.9	127.1	133.0	
0.32	10.99	7.5	19.3		13.7	16.2	5.7	
132.28	11.00	8.8	0.2		0.2	8.4	0.7	
13.05		-1.3	+19.1		+13.5	+12.8	+5.5	

145.33	135.5	136.5	138.5		145.37	40.06	5.31
0.20	+2.9	8.8	19.4				
145.13	12.99	0.7	11.6				
1.29	-3.6	+3.5	+7.8				
157.92							
0.40							
157.52	153.0						
13.20	4.9						
170.72	15.6						
+0.19	+3.3						
170.91							

183.95	144.5	153.0	156.2	159.8	163.3	165.1
0.53	26.2	17.7	14.5	7.9	2.9	5.6
183.42	13.20	9.1	6.2	4.3	2.2	0.9
13.20	17.6	+8.6	+8.5	+6.6	+5.4	+4.7
176.62						
0.82						
194.40						
13.13						

209.53	170.5	178.2	185.8	193.5	209.5	219.0
0.09	8.80	5.7	10.8	3.1	11.0	11.0
209.44	13.4	6.2	10.4	2.6	6.8	3.7
13.26	+1.2	-0.5	+0.4	+0.5	6.4	+7.3
222.70						
0.11						
222.59						
7.44						
230.09						
12.89						
217.14						
0.66						
217.20						
13.25						

176.72  
1.71  
169.01 B.M. Rad Linwood + Benson

119.77  
13.15  
106.62 B.M. Rad Linwood + Benson

102.00	107.50	108.30	109.60	110.00	110.60	113.78
12.99	12.39	11.59	10.29	9.89	9.29	6.21
12.71	10.10	0.17	10.79	8.12	8.12	6.61
			-0.50	+1.17	+1.17	-0.50
			0.50	0.52	0.52	

106.74	109.45	110.70	112.50	113.27	114.60	116.25	117.74
13.22	12.68	12.70	12.50	12.33	12.20	12.00	11.79
120.13	118.94	127.00	129.06	133.18	134.26	135.50	136.46
12.68	13.87	5.31	5.75	12.29	10.77	9.87	8.91
132.81	13.87	12.27	4.25	12.02	12.43	10.53	8.91
0.32	11.60		-0.50	0.35	-1.66	-0.66	0.06
32.48				0.35	0.35	0.35	
12.49				0.35	0.35	0.35	
145.37				0.35	0.35	0.35	
0.35				0.35	0.35	0.35	
145.02				0.35	0.35	0.35	
12.29				0.35	0.35	0.35	
157.31				0.35	0.35	0.35	
0.21				0.35	0.35	0.35	
157.00				0.35	0.35	0.35	
12.99				0.35	0.35	0.35	

170.19	39.50	39.40	40.62	44.50	53.00	56.20	57.99
0.36	6.87	5.97	4.75	12.81	4.31	1.11	12.20
169.23	12.84	7.57	5.25	12.31	4.31	6.11	11.20
192.0700	-0.70	-0.50	-0.50	+0.50		+1.00	+1.00
12.95							
195.02							
0.12							
194.90							
12.84							
207.74							
1.13							
206.61							
12.25							
219.36							

85.83	93.50	94.90	95.70	97.15	98.50	200.50
9.19	1.52	0.12	12.04	10.59	9.24	7.24
8.69			10.90	8.24	9.24	6.74
+0.50			+1.14	+6.74	+1.00	+0.50
85.83	93.00	94.30	95.00	98.00	200.00	
9.19	2.02	0.72		8.94	7.74	
8.69				8.44	7.24	
+0.50				+0.50	+0.50	
209.50	218.50					
9.86	0.86					
10.36	1.86					
-0.50	-1.00					
209.00	218.00					
10.36	1.86					
	0.86					
	-0.50					



Lin Wood Water Grades

connection	153.99			
0+00 W. Line Transit			152.50	
0+15 Brk & "		0.00	153.99	148.50
0+50 Brk & Line "	129.32	14.6	139.4	131.00
1+00 Brk		8.4	120.9	115.50
1+30 Brk	141.7	9.5	119.8	115.00
1+85 Brk	141.7	5.9	135.8	132.00
2+31 Brk 8" c.i. "	144.5	3.9	137.8	135.25
1+63 ⊕	156.5	1.5	143.0	140.0
2+13 1/2 Bend.	169.5	2.4	157.1	150.0
2+75 1/2 Bend.		5.6	163.9	160.7
3+18 1/2 Bend. E.C.		+1.0	170.5	167.3

144.54 Nail Pole S.E. Chalmers & Linwood

153.99	153.99	196.71
9.45	12.24	10.34
153.99	147.65	707.10
	0.02	0.52
	141.73	206.58
	13.22	12.63
	128.51	219.71
	0.81	217.50 End Survey
	129.32	1.71
		1.71 chk.
	106.91	
	12.70	
	119.61	
	0.23	
	119.38	
	12.41	
	131.79	
	0.26	
	131.53	
	12.99	
	144.52	
	0.22	
	144.30	
	12.24	
	156.54.00	
	12.96	
	169.50	
	1.40	
	168.10	
	12.68	
	180.78	
	0.34	
	180.44	
	12.41	
	192.85	
	0.70	
	192.15	
	6.60	
	198.75	

chalmers water stakes

009 Line Stake	119.6	10.9	108.7	104.4
0+45 I-I		5.1	114.5	109.4
0+80 H.F.H.	131.8	0.9	118.7	116.3
1+24 Brk	144.5	4.1	127.7	125.4
1+43 1/2 ⊕ Line Linwood		12.2	132.3	128.7
1+82 I-I Linwood			137.8	135.2
00 22+18 1/2 Bend	192.9			167.3
0+72	198.7	10.9	182.0	178.4
1+44 B.P.C Ret. Guy	107.1	5.6	93.1	189.5
I-I 10'S. of Guy		11.9	95.2	191.7
00 Brk N. Line Guy	219.24	8.0	99.1	194.8
0+55		10.0	209.2	205.5
1+00		1.9	217.3	214.3
X Guy E	207.1	12.5	194.6	191.7
+ Guy W		7.5	197.6	191.7

144.54	144.54	
9.45	12.24	
153.99	147.65	
	0.02	
	141.73	
	13.22	
	128.51	
	0.81	
	129.32	
	106.91	
	12.70	
	119.61	
	0.23	
	119.38	
	12.41	
	131.79	
	0.26	
	131.53	
	12.99	
	144.52	
	0.22	
	144.30	
	12.24	
	156.54.00	
	12.96	
	169.50	
	1.40	
	168.10	
	12.68	
	180.78	
	0.34	
	180.44	
	12.41	
	192.85	
	0.70	
	192.15	
	6.60	
	198.75	
	19.30	0.79
	5.7	
	10.1	
	4.4	
	104.91	
	12.40	
	119.71	
	119.96	
	119.71	
	+0.25	
	0.79	
	-1.04	

F.H. chalmers & State  
 F.H. Bensons Guy  
 107.10  
 193.65  
 13.45  
 14.97  
 +0.48





Water  
Sutton  
Indexed  
C.S.K.

Palm St. State India  
Grading Paving 2to

8-18-30  
MCHugh  
Sammernay

10.74 8.60 8.40

Sewer Grades

N.B. India

B.M.	8.40	107.94		99.54	+ Palm		
B.M.	8.40	107.78	Use his A.1.	99.38	Walker		
0+00 = Ex. M.H.			18.43	89.35	Walker		
				(89.51)	89.34		
0+38.5				5.95	101.83	95.67	+ 6.16
	T.P.	13.00	119.59	119	106.57		
0+77.0	Brk			8.66	110.93	102.00	+ 8.93
	T.P.	12.43	131.85	0.17	119.42		
1+17.21	Brk			1.41	130.44	120.00	+ 10.44
0+47.21				1.33	130.52	122.50	+ 8.02
1+77.21	M.H. T.P.	12.93	144.29	0.49	131.36	125.00	+ 6.36
2+30.21				5.64	138.65	132.87	+ 5.78
2+84.21	D.F.			0.80	143.49	140.75	+ 2.74

30.25  
1.60

2.89

Spur Sewer

00 = M.H. 1				125.00			+ 6.36
0+40.00	con. Plug		11.85	132.44	125.80		+ 6.64
	culvert 1						
00 = Drain Cleanout	connection Ex special slope		107.94		86.65 outlet by		
0+54			8.20	99.74	94.50		+ 5.24
			8.80	99.14	96.50		+ 2.64
1+08	Brk		7.64	100.30	98.50		+ 1.80
1+58	con. Culvert		3.51	104.43	102.16		+ 2.3
000 Connection Culvert	culvert 2						
0+11	Inlet		6.24	101.70	99.00		+ 2.70
			6.24	101.70	99.25		+ 2.45

7.13  
11.30  
18.43

Sewer Plat ①

144.29  
1.52  
142.77  
3.67  
148.44

148.44  
141.56  
6.94  
0.84  
+ 6.10

Storm Drain Cleanout - B.M. 99.54  
old Top Top 6.40  
96.43 Plan 99.50 6.20 103.94  
9.51 99.74 stub  
el. grade 102.00 opp cleanout.  
cleanout, 1/2 No. of line 101.50  
- 1.76

Palm St State to India  
Grades

	5	N
P.C. E. of India	100.00	99.40
9.9		
	100.10	99.40
9.9		
2		
9.9	100.45	99.80
3		
	101.10	100.50
18' Cast of India 80 = 4 P.C.	99.4 12.60 <u>112.00</u> 0.25 111.75 10.0 <u>121.75</u> 10.5 <u>132.25</u> -0.5 <u>131.75</u> 0.23 <u>132.00</u>	101.50 10.5 <u>112.0</u> 12.6 <u>124.6</u> -2.1 <u>122.5</u>
0+67 Brk	108.20 3.8 4.2 <u>116.2</u> -0.4	108.20 3.8 11.2 <u>124.2</u> -8.0 12' out Toe slope
0+87 Brk	110.50 1.5 1.2 <u>113.2</u> +0.3	110.50 1.5 11.5 <u>123.5</u> -10.0 15' out Toe slope
1+07 Brk	113.40 11.2 9.7 <u>124.3</u> +1.5	113.40 +1.40 10.8 <u>125.2</u> 18' out Toe slope
1+43	119.7 4.9 2.4 <u>127.0</u> +2.5	119.7 +7.7 8.7 <u>136.1</u> -16.4 24.6 out Toe slope
1+79 Brk P.C. 20' Rad	126.00 11.5 10.0 <u>147.5</u> +1.5	126.00 +1.4 3.6 <u>131.0</u> -5.0 7.5 out Toe slope
Return		127.55
		128.90
		129.75

	5	N
BM 130.20 5.25 <u>135.45</u>	137.52 7.32 <u>130.20</u> 30.20 BM. BP. SW. Palm + Columbia	129.2 129.48 5.97 6.25 <u>12.28</u> 7.05 6.89 129.50 5.43 5.21 <u>129.62</u>
129.50	129.50	129.50
129.50	200 820 <u>1020</u> -5.10	129.14 6.33 5.73 <u>10.24</u> 6.31
129.50	5.31 4.4	129.34
		6.11 6.11 existing curb



	P.C.	N	B	S	P.C.	B	S
	99.38 12.42 <u>111.80</u> 1.50 110.50 2.91 <u>113.41</u> 1.53 121.88 12.94 <u>134.82</u>	99.40 12.40 12.40 12.40	100.10 11.70 11.70 11.70	100.45 11.35 11.74 -0.41	101.50 10.30 10.20 -0.50	104.85 6.95 7.45 -0.50	108.20 3.60 3.60 3.60
		110.50 1.30 <u>112.40</u> 3.71 119.70	112.40 10.01 10.01 10.01	119.70 3.71 3.71 3.71	126.00 7.84 7.34 -0.50	127.00 6.22 7.22 -0.50	129.35 5.47 5.97 -0.50
		110.50 1.30 <u>112.40</u> 3.71 119.70	112.40 10.01 10.01 10.01	119.70 3.71 3.71 3.71	126.00 8.74 7.24 -0.50	127.55 6.74 6.74 6.74	129.35 4.47 4.47 4.47
		130.20 5.31 <u>135.51</u>		130.20 5.31 <u>135.51</u>			

Palm India to State

	S	UPHAM	N.
S. Line Palm	132.00	137.52 0.05 137.47 13.07	
5.	5.52	150.54 0.62	
P.C 20. P.P.A	131.80	149.92 12.72	
1178	5.72 5.47	162.64 0.50	
		162.14	
1178	131.70	13.02 175.16	
			2.5 WOL E.C E. Line
7.85	132.30		
0+08 E.C.	133.20	131.80 5.72 5.8	00 - E Line Columbia.
48.6	4.3 3.8 +0.5	8.54 133 139.0 +6.0 13.2	0+50
0+56.5	140.3	132.96	28.8 Out
48.6	10.2 12.1 -1.9	13.2 146.2 +13.2 2.0	1400
1+05.7	147.4	-15.2	22.8 out.
48.6	3.1 6.0 -2.9	153.4 +2.9 5.7	1450
1+53.8	154.4	-8.6	12.9 out
48.6	8.4 9.6 -1.2	160.5 3.6 171.5	2400 Imp
2+02.5 P.C.	161.50	160.85	2402.5 P.C.
7.86	1.1 0.5 +0.6		15.7
	162.60	163.20	
7.85			7.85
	163.70	164.00	
7.85		+1.4 3.6 -5.0	7.85
	164.70	164.25	E.C.
7.85			5.1
E.C	165.65	164.00	N. Line
5.1		+1.4 3.6 -5.0	
curb S. Line	166.20		
	8.969.09		

B.M.	RETURN S.E				E.C	P.C.	24
130.20 12.82 143.02							0.7 Low
0.25	S	132.00	31.90	31.80	32.30	33.20	62.50
142.78		11.03	11.13	11.23	10.73	9.83	6.09
15.24		10.93	✓	✓	✓	10.33	✓
156.02		-0.10		0.50		-0.50	
0.61							
155.41	M				31.80		62.03
13.17					11.28		6.55
168.58						7.73	7.05
1.33							-0.50
167.25		0.2 Low	0.2 Low	0.20 Low	64.08	69.00	
5.56	S	63.50	64.50	65.45	66.20	69.10	68.70
172.81		5.08	4.08	3.13	2.38	3.81	4.11
		✓	4.58	✓	2.50	✓	✓
			-0.50		0.12 Low		
	N	63.20	64.00	64.25	64.00	65.00	65.70
		5.38	4.58	4.33	4.58	3.58	2.88
		5.88	5.08	4.83	✓	3.08	✓
		-0.50	-0.50	-0.50		4.050	
	S	64.45	64.65	64.35	70.50	70.84	
		4.36	4.16	3.46	2.31	1.97	
		✓	4.66	3.96	3.31	2.97	
			-0.50	-0.50	-1.00	-1.00	
	N	66.72	67.75	68.72	70.10	70.50	
		1.86	0.83	3.89	2.71	2.31	
		✓	1.33	4.89	4.71	4.31	
			-0.50	-1.00	-2.00	-2.00	

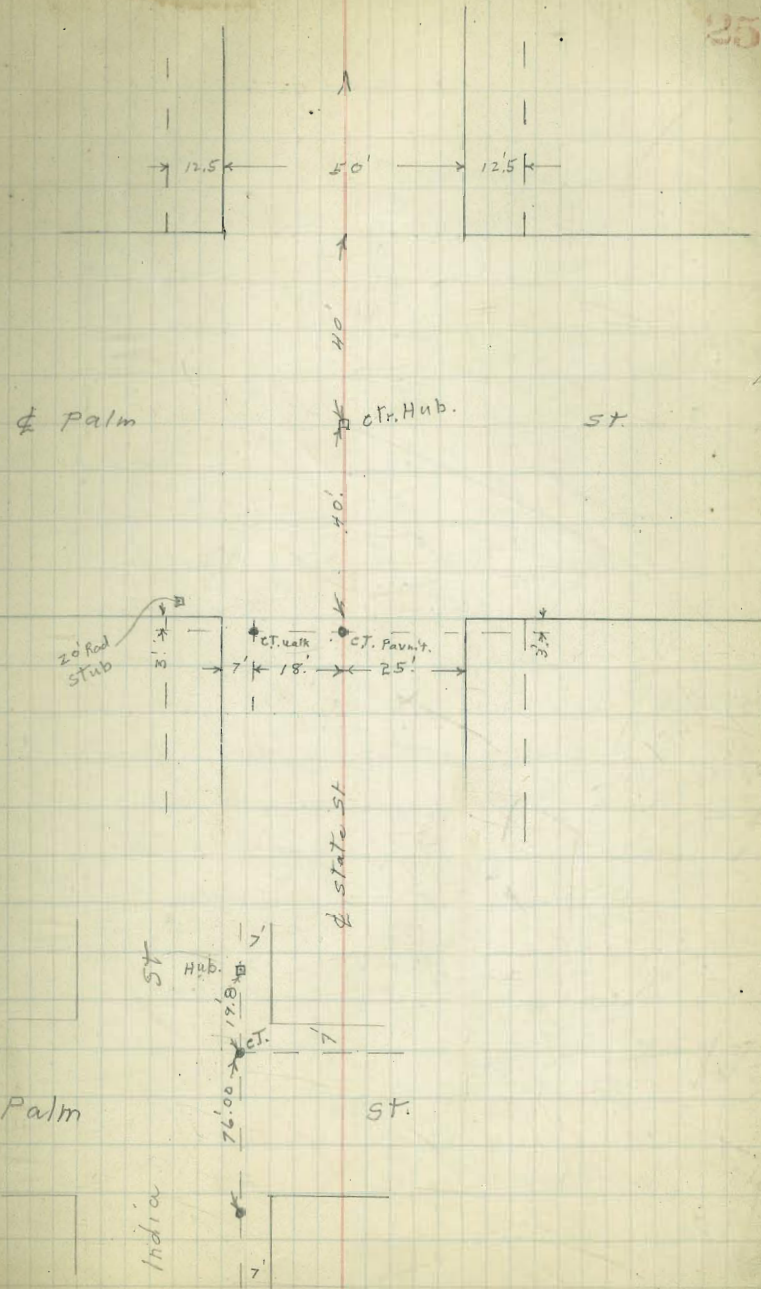
202.5  
6 194.5  
32.4

Palm St State to India

Oct. & Quines St.

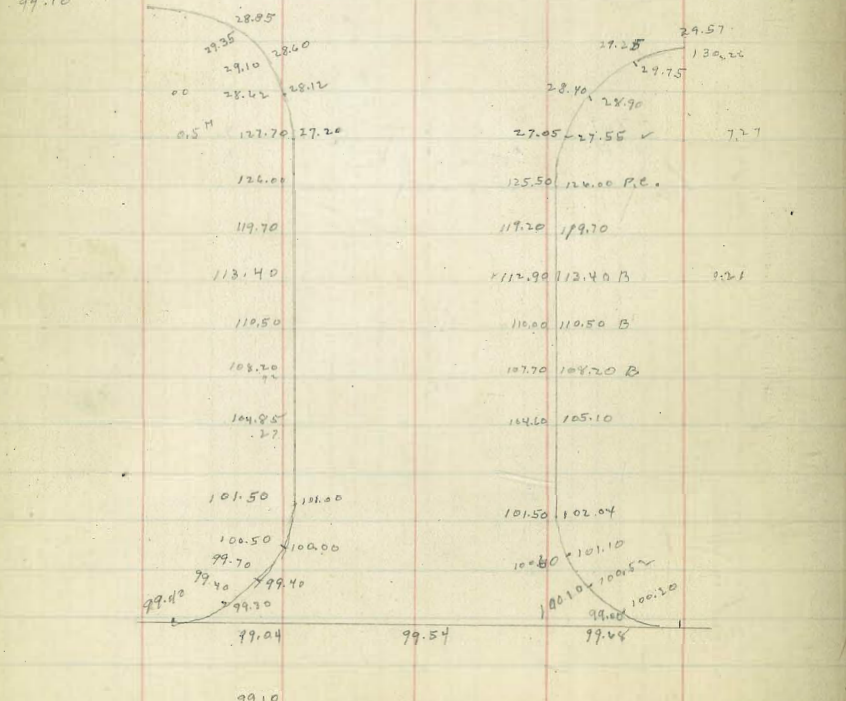
25

	S		N	
curb shine	167.10	175.14	165.00	N. Line.
5'	$\frac{6.06}{6.16}$	$\frac{0.76}{174.40}$	$\frac{21.1}{11.3}$	5
P.C.	168.70	186.13	145.70	P.C.
7.85			15.7	
	168.45			
7.85		167.75		
	$\frac{168.65}{17.5}$		15.7	
7.85	$\frac{5.0}{+12.5}$			
	169.35	170.1		
7.85			2.5	
R.S.W. of old E. Line - P.C.	$\frac{170.50}{15.6}$		$\frac{170.5}{15.6}$	old E. Line State End of job
	$\frac{5.0}{+10.6}$		$\frac{11.3}{+4.3}$	
old E. Line State	$\frac{170.84}{15.3}$			
	$\frac{5.0}{+10.3}$			



186.1  
 $\frac{5.0}{181.1}$   
 $\frac{10.6}{170.5}$

$$\begin{array}{r} 99.34 \\ 10.74 \\ \hline 110.12 \\ 10.58 \\ 99.54 \\ \hline 11.04 \\ 99.04 \\ \hline 10.44 \\ 99.68 \\ \hline 9.92 \\ 100.20 \\ 9.60 \\ \hline 100.52 \\ 9.02 \\ \hline 110 \\ 9.62 \\ \hline 100.50 \\ 10.42 \\ \hline 9.70 \\ 10.77 \\ \hline 11.02 \\ 99.10 \end{array}$$



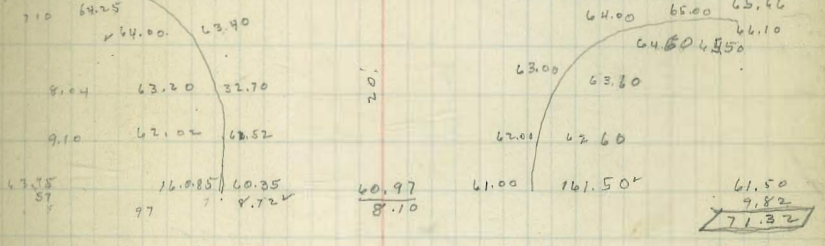
India

Palm

$$\begin{array}{r} 110.12 \\ 0.32 \\ \hline 109.80 \\ 12.73 \\ \hline 122.53 \\ 12.37 \\ \hline 134.90 \end{array}$$

$$\begin{array}{r} 70.50 \\ 20.00 \\ \hline 50.50 \\ 48.97 \\ 47.75 \\ 46.72 \\ 45.70 \\ 44.50 \\ 45.20 \\ 46.22 \\ 64.30 \\ \hline 6.94 \\ \hline 25 \\ 65.32 \\ \hline 15.92 \\ 15 \\ 65.54 \\ 15 \\ 65.51 \\ \hline 25 \\ 67.44 \end{array}$$

$$\begin{array}{r} 70.47 \\ 0.77 \\ \hline 1.77 \\ 1.00 \\ 69.34 \\ 68.15 \\ 69.35 \\ 68.65 \\ 68.15 \\ 67.95 \\ 68.20 \\ 68.52 \\ 69.00 \\ 68.70 \\ 68.52 \\ 67.44 \end{array}$$



$$\begin{array}{r} 169.07 \\ 1.85 \\ \hline 167.22 \\ 4.02 \\ \hline 171.24 \end{array}$$

$$\begin{array}{r} 70.47 \\ 0.18 \\ \hline 5.09 \\ 2.53 \\ 8.73 \\ 4.41 \\ 70.47 \\ 1.13 \\ \hline 69.34 \\ 13.31 \\ 1.3 \\ 68.45 \\ 1.80 \\ 0.18 \\ 1.30 \\ 1.48 \\ 1.69 \\ \hline 3.17 \end{array}$$

$$\begin{array}{r} 65.54 \\ 5.09 \\ 2.53 \\ 8.73 \\ 4.41 \\ 70.47 \\ 1.13 \\ \hline 69.34 \\ 13.31 \\ 1.3 \\ 68.45 \\ 1.80 \\ 0.18 \\ 1.30 \\ 1.48 \\ 1.69 \\ \hline 3.17 \end{array}$$

$$\begin{array}{r} 170.00 \\ 0.65 \\ \hline 170.65 \end{array}$$

$$\begin{array}{r} 70.47 \\ 65.54 \\ \hline 4.93 \\ 3.8 \\ 1.13 \\ 11.4 \end{array}$$

Header Stakes

BM	E. ch line	E. line	R.C.		B	
79.38	Paymt	100.40	101.55	104.77	108.00	110.30
9.60	9.56	8.58	7.43	4.21	0.98	10.13
108.98	9.48					
0.98	0.11 H					
108.00	B	36	36	← 10.5	← 14	
12.43	113.20	117.50	125.80	127.63	129.20	29.38
120.43	7.23	0.93	6.34	4.49	2.94	2.80
0.92				4.75		29.58
119.58				27.140		2.57
12.64						
132.14						
1.94						

Columbia

130.20	RC. 5	
13.09	10.69	32.71
143.29	132.60	10.58
12.01	11.06	
156.30	81.10	31.73
0.18	12.19	11.56
156.12		
12.95		
169.07		





Indexed  
C.S.K.

Water Line & Palm St  
State to Union.

8-30-30

29

BM	12.7	193.8	181.1			
old line state			181.4	166.8	+14.6	
OT			8.0	185.8	173.5	12.3
0487.57	9.7	203.0	1.4	192.4	180.2	12.2
			0.5	193.3		
1422.5			8.7	194.3	185.3	9.0
			6.1	196.9	89.1	7.8

Indexed  
C.S.K.

Herbert Hoover High School

8-29-30  
Mills

curb Grades for Parking

	A.1.	A.2.	A.3.B	A.4	A.5.	P.C. B.K	E.C.	Δ c.P.C. B.K
B.M	356.14							
	5.57	57.03	55.0	57.05	57.00	56.95	57.01	57.20
	56.98	5.52	57.05	5.50	5.55	5.60	5.54	5.35
	6.41							
	362.55							

(A.D)

	6.22	56.32	56.32	56.32	56.38	56.45	56.51	56.70
Gutter	56.33							

	A.9.	A.10.	A.11.	A.12.	A.13.	A.14.	A.15.	Δ c.P.C. B.K
curb	57.33	57.47	57.60	57.71	57.82	57.93	58.04	58.15
	5.22	5.09	4.95	4.84	4.73	4.62	4.51	4.40

	56.83	56.97	57.10	57.21	57.32	57.43	57.54	57.65
Gutter								

	P.C.	B.K	B.K	B.K	E.C.	E.C.	E.C.	Δ c.P.C. B.K
curb	58.02	57.98	57.95	57.93	57.91	57.82	57.73	58.04
	4.53	4.57		4.62	4.64	4.73	4.82	4.92
					4.62		4.82	OK
					4.02			X on walk

	57.52	57.48	57.39	57.30	57.22	57.14	57.06	
Gutter								

Change See Page 33

	A.16.	A.17.	A.18.	A.19.	A.20.	A.21.	A.22.	A.23.
curb	58.15	58.25	58.16	58.11	58.03	57.93	57.82	57.73
	4.93	4.73	4.82	4.87	4.92	4.98	5.02	5.08

58.15  
4.83  
62.98

	57.65	57.75	57.61	57.50	57.38	5.73	57.25

P.C.  
McElroy  
B.1.

B Line

	B.1.	B.2.	B.3.	B.4.	B.5.	B.6.
curb	56.68	56.75	56.75	56.85	57.00	57.55
	5.87	5.80	5.80	5.70	5.55	
	7.362.55					

	55.94	56.25				
Gutter						

	B.7.	B.8.	B.9.	B.10.	B.11.	B.12.
curb	57.15	57.30	57.45	57.60	57.75	57.90
	5.40	5.25	5.10	4.95	4.80	4.65

	56.65		57.10		57.40
Gutter					

363.21

	B.13.	B.14.	B.15.	B.16.	B.17.	B.18.
curb	58.00	58.10	58.10	58.16	57.91	57.95
	5.21	5.11	5.11	5.11	5.30	5.36

	57.50	57.60	57.60	57.60	57.41	57.35
Gutter						

H. Hoover School

B Line

57.77  
5.88

363.21 B  
 e.c. <sup>Δ curb</sup> B.K. <sup>Δ e.c.</sup> <sup>Δ e.c.</sup> P.C.  
 8.19 8.20 8.21 8.22 8.23 8.24 8.25 8.26

curb 57.98 58.10 58.26 58.43 58.60 58.75 58.75 58.75  
 5.23 5.11 4.74 4.74 4.61 4.46 4.10

gutter 57.48 57.60 57.76 57.93 58.10 58.25 58.28 58.25

curb 8.27 8.28 8.29 8.30 8.31 8.32 8.33 8.34  
 58.75 58.75 58.75 58.75 58.75 58.75 58.69 58.61  
 4.46 4.52 4.60

gutter 58.25 58.25 58.25 58.25 58.25 58.25 58.19 58.11

358.45  
4.86  
363.31

curb 8.35 8.36 8.37 8.38 8.39 8.40 8.41 8.42  
 58.53 58.45 58.29 58.29 58.20 58.34 58.27 58.20  
 4.68 4.76 5.02 5.02 4.91 4.77 5.04 5.11

gutter 58.03 57.95 57.74 57.79 57.90 57.84 57.77 57.70

curb 8.43 8.44 8.45 8.46 8.47 8.48  
 58.14 58.12 58.10 58.09 58.08 58.05  
 5.17 5.19 5.21 5.23 5.23 5.25  
 5.23 5.25  
 5.02 5.10  
 5.02 5.10

gutter 57.60 57.55 57.50 57.49 57.49 57.49  
 5.42

H. Hoover High School

C. Line

A. 6.5

C. 1.

56.45

C. 2.

C. 3.

C. 4.

C. 5.

C. 6.

C. 7.

C. 8.

C. 9.

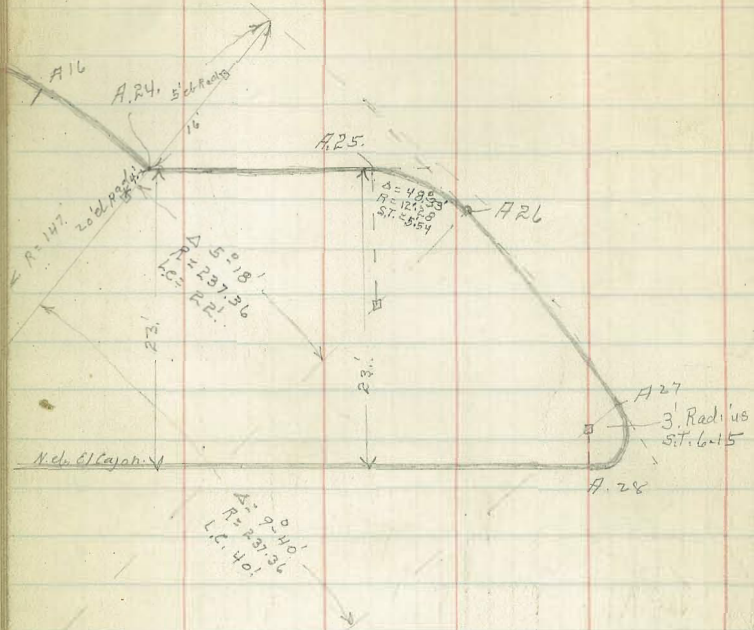
C. 10.

C. 11.

32

Change in Curb at Herbert Hoover High School  
To Miss Meter Box  
9-8-30

33







Indexed  
C.S.K.

Vermont St Paving

9-8-30

Water Pipe Grades

oo: ⊕ N. line Cleveland

# 1	4.8	89.1	286.0
# 2	4.7	89.2	86.2
# 3	4.5	89.4	86.4
# 4	4.2	89.7	86.5
# 5	4.1	89.8	86.7
# 6	3.9	90.0	86.9

6 = s. line Hendricks

293.1

# 1	2.9	90.2	287.1
-----	-----	------	-------

N. Line Hendricks

# 1	3.1	90.0	287.1
# 2	3.6	89.5	286.5

N. End.

# 1	4.0	89.1	286.0
-----	-----	------	-------

Hendricks  
293.1

⊕ W. Vermont

# 1	5.9	88.2	86.0
# 2	2.9	90.2	87.1

⊕ E. Vermont

# 1	2.8	90.3	87.6
-----	-----	------	------

B.M.S.M. Under Vermont

+3.1 289.73  
4.21

+3.0 293.94  
2.82

+3.0 291.12  
2.00

+3.2 293.12

+3.1

+3.1

+2.9

+3.1

+2.9

+3.0

+3.1

291.12

2.09

293.21

62

90.50

2.71

2.81

2.91

2.96

2.91

83.11

B.M. C.T. S.E. Vermont + Hendricks

87.33 86.90

89.00 88.50

88.43 88.70

88.36

88.22 88.29

89.50 88.90

89.90

89.20 88.70

88.25 88.40

88.35

89.00 88.40

90.3

90.7 90.1 91.0

2.7 2.5 2.3

88.7 86.0 90.3

3.46 3.21 2.96

3.71 89.50

88.72 89.50

88.48

89.85

89.95

90.00 291.00

90.10 2.00 91.00

90.20 90.30 90.40

90.40 90.40

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90.40 90.40

36

3.55

1.75

0.5

1.3

3.7

5.84

87.53

Vermont

Hendricks

90.4

90.77

90.40

90.50

90.20 90.40

90.30 91.10

90.25 91.0

90.30 90.86

90.40 90.86

90.40 90.86

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90.40 90.86



Carroll

Index  
C.S.K.Alley Bk 25 W.H.  
Madison to Adams Bet Georgia & Florida

9-10-30

	E. Line	B.M. SE Madison & Florida	W. Line		E. Line	W. Line
00 = N. Line Madison	curb 11.24 40.80 40.81	340.81 11.23 11.34	329.09 13.05 342.14 1.48 340.66 11.38	341.61 10.43 10.56	curb 9.98 342.06 342.07	3780 B 49.60 4.27 4.65 -0.38
0705 B		342.00 10.04 7.22 +2.88	352.04 10.04 5.62 346.37 6.58	42.00 10.04 4.95 45.09		4+00 B 49.40 4.47 4.82 -0.35
0710 B			352.95 3.30 7.34 349.65 4.22 353.87	42.70 4.70 4.70 +4.44		4+20 B 48.90 4.77 5.20 -0.22
0720 B		43.70 8.34 6.02 +2.32		43.90 8.14 4.81 +3.33		4+40 B 48.20 5.67 4.85 +0.82
0740 B		45.70 6.34 6.54 -0.20		45.90 6.14 4.25 +1.89		4+60 B 47.50 6.37 6.37 0.0
0760 B		46.90 5.14 5.88 -0.74		47.10 4.94 4.26 +0.68		4+6.3 Line Adams 46.80 7.07 7.06 Pavmt
0780 B 46.67		47.45 4.57 5.91 -1.32		47.65 4.39 4.11 +0.24		Header Chk 4.97 49.60 49.40 48.90
1726 1/2		48.03 4.01 5.88 -1.87		48.23 4.72 4.44 +0.28		49.60 2.17 2.22 +0.05
1773 3/4		48.61 3.43 4.90 -1.47		48.81 4.14 3.42 +0.72		49.40 2.17 2.22 +0.05
2720 B		49.20 3.75 3.75 0.0		49.40 3.55 2.87 +0.68		49.50 2.07 2.07 0.0
2766 1/2		49.33 3.62 3.62 0.0		49.53 3.42 2.34 +1.08		49.40 2.00 2.01 0.0
3713 3/4		49.46 3.49 3.28 +0.21		49.66 4.21 2.71 +0.00		49.40 2.00 2.01 0.0
3760 B 4.27		49.60 3.35 3.35 0.0		49.80 4.07 3.07 +1.00		49.40 2.00 2.01 0.0

Sewer Laterals

①	②	③	④	⑤
52.95	52.95	52.04	52.04	52.95
343.59	342.76	340.25	339.42	343.20
9.36	10.19	11.79	12.62	9.75
3.65	3.27	5.83	5.28	4.45
5.71	16.90	5.76	17.24	+5.30

3725 E.

2775 E.

1725 E.

0725 E.

1725 W.

137

Carroll

Alley S. of Madison Bet.

9-10-30

Indexed

Maryland &amp; Delaware

C.S.K.

	W. Line	S.M. S.M. Madison & Maryland	E. Line
00: S. Line Madison	345.63 5.17	346.98 4.74 351.92 5.84	345.81 5.00
0440	45.46 5.34 4.67 + 0.67	346.08 4.72 350.80 6.34 344.46 3.43	45.56 5.14 4.88 + 0.36
0780 B	345.30 5.50 4.50 + 1.00	347.89 4.30 343.59 5.59	345.30 5.50 5.24 + 0.26
1+20 B	44.90 5.40 5.79 + 0.11	349.18 2.20 346.98	345.00 5.80 5.83
1+60 B	44.30 6.50 6.41 + 0.09	344.50 6.30 6.02 + 0.28	
1+80 B	43.90 6.90 6.84 + 0.06	344.00 3.89 3.84 + 0.05	
2+00 B	43.25 4.64 3.64	343.30 4.59 4.76 - 0.17	sewer lateral
2+20 B	42.10 5.79 5.97 - 0.18	342.10 5.79 5.23 + 0.56	
2+25 S. End.	41.70 6.19 6.29 - 0.10	341.70 6.19 5.58 + 0.61	

38

Sewer Lateral

41.89  
337.57  
10.37  
4.76  
5.56

2+00 E.

Indexed  
C.S.K.

Hamilton School

9-19-30

olive st curb stakes Fairmont East

Fairmont	N. ch	gutter	B.M. S.E. Corner + Fairmont
10' E. of E. ch. = end Return	6.18	294.61	297.19
	95.26	5.85	303.04
		6.84	309.88
			7.06
47.34 E of E. ch = 2. line B.R.K. = 00	295.50		296.56 B.M. F.H. S.E. Fairmont + Olive
	5.94 ✓		4.78
			301.44
0+50	95.65		
	5.79 ✓		
1+00	95.80		
	5.64 ✓		
1+50	95.95		
	5.49 ✓		
2+00	96.10		
	5.34 ✓		
2+50	96.25		
	5.19 ✓		
3+00 = W. line 44 <sup>th</sup> St.	296.40		
	5.04		
	296.30		
	5.14		
	296.00		

indexed  
C.S.K.

Alley: BIKs Washington Hts  
Bet Jackdaw & Inoalls

9-22-30  
M. 1100

	W. Line		E. Line	
00: S. Line Monticello	274.09 5.95 5.92		274.23 5.81 5.781	
0+45 Brk	76.65 3.39 3.41 -0.02	280.03 5.46 274.57 6.08 280.65 3.09	76.55 3.49 3.26 +0.23	
0+65 Brk	77.42 2.62 3.10 -0.48	277.56 4.25 281.81 4.50	77.25 2.79 0.79 +2.00	
0+85 Brk	77.63 4.18 4.18 0.0	277.31 2.73 280.04	77.43 4.38 2.38 +2.00	77.43 2.61
1+05 Brk 55	77.75 4.06 3.87 +0.29		77.55 4.26 4.29 -0.03	
1+32 E				1+32 E
1+60 Brk	77.50 3.15 2.65 +0.50		77.30 3.35 2.35 +1.00	77.62 4.19 3.19 +1.00
1+80 Brk	77.30 3.35 2.35 +1.00		77.10 3.55 3.55 0.0	
2+00 Brk	77.00 3.65 2.65 +1.00		76.80 3.85 3.58 +0.27	
2+30	76.55 4.10 3.14 +0.96		76.35 4.30 3.30 +1.00	
2+60 Brk	76.10 4.55 1.55 +3.00		75.90 4.75 4.69 +0.06	
2+80 Brk	75.58 5.07 3.07 +2.00		75.37 5.28 4.73 +0.55	
3+00 N. Line Lewis	74.62 5.41 5.29 0.12 High		74.37 5.66 5.46	

Indexed  
C.S.K.

Alley Bk3. Washington Hts

9-22-30

	W. line	BM N.W. Ft Station + Jackdaw.	E. line
00: S. line Lewis	274.85 5.78 5.20	270.52 5.52 276.04 3.01	274.67 5.36 5.37
0405.	74.96 5.07 4.74 +0.33	273.03 4.39 277.42 3.90	74.82 5.21 4.86 +0.35
1+25	75.25 4.78 5.03 -0.25	273.52 5.75 279.27 4.32	75.25 4.02 2.12 +1.90
1+45	75.20 4.07 3.87 +0.20	274.95 5.08 280.03	75.20 4.07 3.17 +0.90
1+65	75.07 4.20 3.56 +0.64		75.07 4.20 4.18 +0.02
1+85	74.85 4.42 4.06 +0.36		74.85 4.42 4.69 -0.27
1+05	74.52 4.75 4.52 +0.23		74.52 4.75 4.79 +0.04
1+35	73.95 5.32 5.07 +0.25		73.95 5.32 4.42 +0.90
1+65	73.38 4.04 3.79 +0.25		73.38 4.04 4.37 -0.33
1+85	73.06 4.36 4.46 -0.10		73.06 2.98 3.08 -0.10
2+05	72.87 4.55 4.39 +0.16		72.87 3.17 3.11 +0.06
2+25	72.73 4.69 4.39 +0.30		72.73 3.81 3.11 +0.14
2+45	72.53 4.89 4.35 +0.54		72.49 3.65 3.74 +0.26

	W. line	E. line
2+65	72.18 3.86 3.73 +0.73	72.03 4.01 3.73 +0.28
2+75 N line Ft Station	71.97 4.07 4.07 0.8	71.81 4.23 4.21

41

Indexed  
c.s.k.

W. Pt. Loma Blvd.  
Water Grades.

10-10-30

BM. 88 N.E. Bacon  
& 1/2 Fair c

W. End Paynt. 269	+608	P.C.	2-56.1	B-K	3-44.65	-B	B	B	
Finish	6.0	6.8	8.2	9.6	10.9	12.2	13.6	14.7	15.5
Pipe	3.2	4.0	5.4	6.8	8.1	9.4	10.8	11.9	12.7
	11.4	10.8	12.2	13.6	14.7	15.5	16.4	17.2	17.9
	8.8	8.0	6.8	5.4	4.1	2.8	1.5	0.6	6.9
	+3.4	+3.4	+3.2	+3.2	+3.2	+3.2	+3.1	+2.9	+2.8

21.01	7.56	2-55.7	B	B	2-50.	B	P.C.	1	2
28.57	1.95	Finish	16.0	16.6	17.3	17.7	18.2	18.8	19.2
26.02	7.55	Pipe	13.2	13.8	14.5	14.9	15.4	16.0	16.4
34.17	5.37		9.2	8.6	7.9	7.5	7.0	6.4	6.0
28.80	4.82		6.3	5.6	4.8	4.5	4.3	3.9	3.4
33.62	5.90		+2.9	+3.0	+3.1	+3.0	+2.7	+2.5	+2.6
27.72	3.80								
33.52	6.80								
26.72	1.49								
28.21	2.59								

25.42 chkr BM  
S.W. 1/2 Ave &  
S.S. Cliffs Blvd.

3	4	5	6	7	8	9	10	11	12
Finish	6	52.		4.8	4.53.2		23.6		2-47.75
Pipe	17.7	18.1	18.5	19.0	19.4	19.9	20.3	20.8	21.1
	4.7	4.3	3.9	3.6	3.2	2.7	2.3	1.8	1.5
	2.0	1.7	1.3	1.0	0.6	0.2	0.1	0.1	0.1
	+2.7	+2.6	+2.6	+2.6	+2.7	+2.7	+2.7	+2.7	+2.7

B	2-61.2	B	2-52.4	B	3-52.4	B	1
Finish	24.2	25.2	26.0	26.8	27.2	27.2	27.2
Pipe	21.4	21.9	22.4	22.8	23.2	23.6	24.0
	7.2	6.7	6.2	5.8	5.4	5.0	4.6
	4.4	4.0	3.5	3.1	2.5	2.0	1.6
	+2.8	+2.7	+2.7	+2.7	+2.7	+2.7	+2.6

2	3	4	5	6	7	8	9	10	11
Finish	29.4	29.4	29.6	29.6	29.4	29.2	29.2	29.2	29.2
Pipe	25.5	26.0	26.6	26.7	26.8	26.6	26.4	26.1	26.1
	8.7	8.2	7.6	7.5	7.4	7.4	7.2	7.8	8.1
	6.0	5.4	4.9	4.6	4.4	4.5	4.7	5.0	5.2
	+2.7	+2.8	+2.7	+2.9	+3.0	+2.9	+2.9	+2.8	+2.9

2	3	4	5	6	7	8	9	10	11
Finish	27.4	27.4	27.6	27.6	28.0	28.6	28.6	28.6	28.6
Pipe	25.8	25.5	25.2	24.9	24.6	24.8	25.2	25.8	25.8
	8.4	8.7	9.0	9.3	9.6	9.4	9.0	7.8	7.8
	5.7	6.0	6.3	6.5	6.8	6.9	6.7	6.4	5.1
	+2.7	+2.7	+2.7	+2.8	+2.8	+2.7	+2.7	+2.6	+2.7

15.37  
9.83  
6.54 BM. BP. R.E. Bacon + W. Pt. Loma Blvd.

26.54  
2.61 chkr B. J357 R34  
6.04

22.34  
2.84  
19.50 BM. N. E. Lotus + W. Pt. Loma Blvd

24.57  
4.22  
27.27 BM. BP SW S.S. Cliffs Blvd + W. Pt. Loma Blvd

34.17  
3.88  
30.29 BM. BP. S. E. Lark spur + W. Pt. Loma Blvd.

33.62  
6.06  
27.56 BM. SPK. Tel Pole S.W. Seaside + W. Pt. Loma Blvd.

34.19  
2.77  
31.42 BM. Top F.H. S. E. Castellar + W. Pt. Loma Blvd

W. Pt. Loma Blvd  
Water Grades. (con)

	B	B 50'	B 50'	B	Slope Seaside	T	End	Time
83.62	29.4	29.6	29.6	29.2	27.1		25.3	
	2.8	2.8	2.8	2.8	2.4		2.8	
	26.4	26.8	26.8	26.4	24.3	23.0	22.5	24.0
	7.0	6.8	6.8	7.2	7.3	10.6	11.1	11.6
	4.2	3.8	4.1	4.4	5.7	7.2	6.9	6.7
	+2.8	+3.0	+2.7	+2.8	+3.6	+3.4	+4.2	+3.4
	F.H.							
+9.15	27.56	28.00						
0.22	5.42	4.99						
+9.37	32.98	4.18						
0.49		40.80						
+8.88								

Sewer Laterals

#33	#32	#31	#30	#29	#28	#27	#26	#25	#24
27.56	24.00	25.00	23.00	24.00	23.50	23.80	22.30	omit	23.00
6.63	16.99	9.19	17.19	16.99	10.69	11.34	11.89		10.66
34.17	2.91	2.20	2.04	4.42	4.14	5.19	6.96		3.79
2.77	+7.24	+7.00	+6.75	+5.77	+6.55	+6.20	+4.93		+4.64
31.42	2.2	2.2	2.2	1.9					
2.18									
33.60	21.80	21.30	21.50	21.00	20.50	19.60	17.00	18.40	18.20
3.91	11.90	12.30	12.10	12.40	13.10	14.00	14.60	8.85	9.05
30.29 BM. 52	5.76	5.15	4.34	3.71	4.77	5.41	6.1	0.40	2.44
Larkspur + W.P.L.	+6.04	+7.15	+7.74	+8.69	+8.33	+7.59	+6.49	+8.05	+6.61
	13	12	11	10	9	8	7	6	5
	17.00	17.00	16.00	16.00	14.00	12.00	10.30	8.50	6.60
	4.25	10.25	7.25	7.25	7.25	11.25	12.75	14.75	9.26
	2.44	1.84	1.00	2.24	2.51	4.04	5.40	6.61	1.49
	24.29	+5.81	+7.37	+6.25	+4.97	+6.74	+7.17	+7.58	+8.14
	2.26	3	2	1					
	27.25	4.00	2.50	1.40					
	BM. N.E. Lotus	11.96	13.46	14.54					
	W.P.L.	5.70	8.50	8.22					
		+6.06	+4.96	+6.37					

19.50									
3.75									
23.25									
7.22									
15.96									
4.42									
11.54									
3.50									
15.04									
5.51									
9.5309.52									
N.S. Bacon + Vittoria									

Culvert #2

E. End good curb	25.79	27.56 BM.
	21.00	0.23
		27.79
		12.45
2 line Seaside & d. wendeb.	35.60	14.94
	1.29	0.24
		15.18
		13.6
6.5 S. = 5 End. cl. inlet	45.80	1.6
	21.00	2.6
		-1.1 +0.5
00 F.L. cl. inlet	22.5	
	5.3	
	2.2	
	73.1	
410.8 - FL A Brk	18.9	16.9 lowered 2.0
	8.9	10.9
	7.8	7.8
	71.1	+3.1
0+40	8.3	7.2 lowered 1.0
		8.0
		5.3
		+2.7
		17
		4.2
		58.2
		99.4 pc
		55
		184.4
		38
		192.4
0+70 Brk	-2.5	6.54
	17.7	5.19
	12.3	11.73
	+5.4	
1+20 End outlet	-4.5	
	5.0	

Culvert #1

00. cl. Inlet	478 A	0+58.2	0+99.4 P.C.	1+54.4 M.H.	Outlet
	12.01				1+92.4
Top cl.	6.30	6.30			Top Headset
	5.43	5.71			0.50
	3.77				41.23
	+0.36				11.49
					0.05
F.L.	+0.50	+0.70	-0.5	-1.10	-2.0
	11.23	11.53	12.23	-1.10	-3.30
	5.07	4.61	4.40	13.73	15.03
	+6.46	+6.92	7.83	5.03	11.68
			7.80	8.44	+3.35
X 32.90					Bottom Headset - 3.97
	27.00	-4.00			15.70
	5.90	5.90			-3.95 FL
					EX 24" pipe

Handwritten notes and calculations on the left page of a ledger, including a header '4 - N. Pt. Loma' and various numerical entries organized in columns.

PM	8:00	8:15	8:30	8:45	9:00	9:15	9:30	9:45	10:00	10:15	10:30	10:45	11:00
27.56	26.6	27.3	28.3	29.6	29.7	29.4	29.4	27.6	27.10	27.00			
6.44	8.4	6.7	5.2	4.4	4.3	4.6	4.8	5.3	5.80	5.74			
34.00	5.3	6.5	5.2	4.3	3.9	4.4	3.9	5.0	6.2	5.9			
4.73	+0.1	+0.2	0.0	+0.1	+0.4	+0.2	+0.6	+0.3	-0.1	0.0			
27.27													
3.53													
32.90	S. 25.8	27.5	28.0	29.7	30.3	30.4	30.1	29.3	28.7	28.5			
4.38	8.2	6.5	6.0	4.3	3.7	3.6	3.9	3.5	4.1	4.40			
28.42	7.4	7.4	4.5	1.2	0.8	3.4	1.3	0.5	0.1	4.37			
6.12	+0.8	+0.9	+1.5	+3.1	+2.9	+0.2	+2.4	+3.0	+3.7				
34.54													
8.63													
25.91	N. 27.2	27.6	28.0	28.3	28.7	29.0	29.2	29.4	29.2	29.0			
4.12	5.7	5.7	4.8	4.5	3.8	3.5	3.1	2.8	3.1	3.4			
30.03	5.6	5.5	5.2	6.2	5.4	5.2	5.0	4.8	5.6	5.6			
5.78	+0.1	-0.3	-0.4	-0.7	-0.4	+0.1	+0.1	+0.1	+0.3	-0.1			
24.30	S. 28.13	28.5	28.8	29.1	29.4	29.70				30.20			
24.29	3.7	4.3	4.0	3.7	3.1	4.44				4.34			
2.04	carb 4.47	2.9	3.6	3.3	4.6	4.76				4.46			
26.33		+1.4	+0.4	+0.4	+0.5								
6.43													
19.50	N. 28.5	28.0	27.5	27.00	26.7	26.3	26.0	25.4	24.8	24.7			
2.50	6.0	6.5	7.0	7.5	7.8	7.7	7.0	4.6	5.2	5.8			
22.00	5.7	5.8	6.3	6.8	7.4	3.1	3.7	4.2	5.1	6.2			
11.86	+0.3	+0.7	+0.7	+0.9	+0.4	+0.6	+0.3	+0.4	+0.1	-0.4			
8.04													
1.82	S. 29.6	29.0	28.4	27.9		26.80	26.4	26.1	25.7	25.7			
2.01	5.0	5.5	5.1	4.74		3.23	3.6	3.9	4.3	4.3			
5.47	3.2	3.4	3.7	4.53	Green	2.318	2.8	3.0	3.2	3.2			
6.34	+1.4	+1.9	+2.4				+1.6	+0.9	+1.1				
6.54													
23.6	N. 23.6		23.44	23.0	22.6	22.1	21.7	21.2	20.8	20.8			
6.4	6.4		6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4			
6.8	6.8		6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8			
0.4	-0.4		-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4			
4.8													
25.3	S. 25.3	25.12			24.30	23.8	23.3	22.9	22.4	21.9			
4.7	4.7	4.48			2.08	2.5	3.0	3.4	3.7	4.4			
3.9	3.9	4.96				1.4	1.5	2.1	2.8	3.2			
0.8	+0.8					+1.1	+1.5	+1.3	+1.1	+1.2			
2													
20.6	N. 20.6	20.1	19.6	19.1	18.62	18.10	17.58	16.8	16.1	15.0			
5.7	5.7	6.2	6.7	7.2	8.4	8.9	9.3	9.8	10.4	11.0			
5.3	5.3	5.8	6.5	7.4	8.2	8.9	9.6	10.5	11.4	12.4			
0.4	+0.4	+0.4	+0.2	-0.2	+0.2	0.0	-0.1	-0.3	0.0	+0.1			
21.4	S. 21.4	20.9	20.4	19.9	19.5	18.0	17.3	16.65	15.7	15.7			
4.9	4.9	5.4	5.9	6.4	7.0	7.5	8.0	8.5	9.0	9.5			
3.5	3.5	4.3	5.1	6.0	7.0	8.0	9.0	10.0	11.0	12.0			
1.4	+1.4	+1.1	+0.8	+0.6									

Handwritten notes and calculations on the right page of a ledger, including a header 'M. Line S. side' and various numerical entries organized in columns.

M. Line S. side	10. N. Brk.	15. N. Brk.	20.5 End	28.5 End	34.5
27.56	25.60	25.0	24.0	18.22	12.45
12.4		3.8	4.8	4.8	4.8
27.84		11.6	16.3	4.23	7.6
12.19		-7.8	13.6	9.0	9.0
15.65			-11.5	-15.9	-15.6
10.25					
15.90					
13.00					
2.90					
1.93					
4.93					
27.56	25.8	25.0	24.0	18.22	12.45
1.86	3.0	3.8	4.8	4.23	7.6
29.42	10.8	11.6	13.0	9.0	9.0
18.82					
16.40					
0.22					
16.62					
13.12					
3.50					
6.0					
9.5					
25.0					
24.0					
18.2					
12.45					
3.0					
14.3					
17.3					
25.90					
24.0					
18.2					
12.45					
3.0					
14.8					
17.8					
24.70					
26.70					
8.7					
6.8					
15.3					













Cont. on p. 52

WEST POINT LOMB & CO.  
PAVING  
CONST.

LARKSPUR ST.

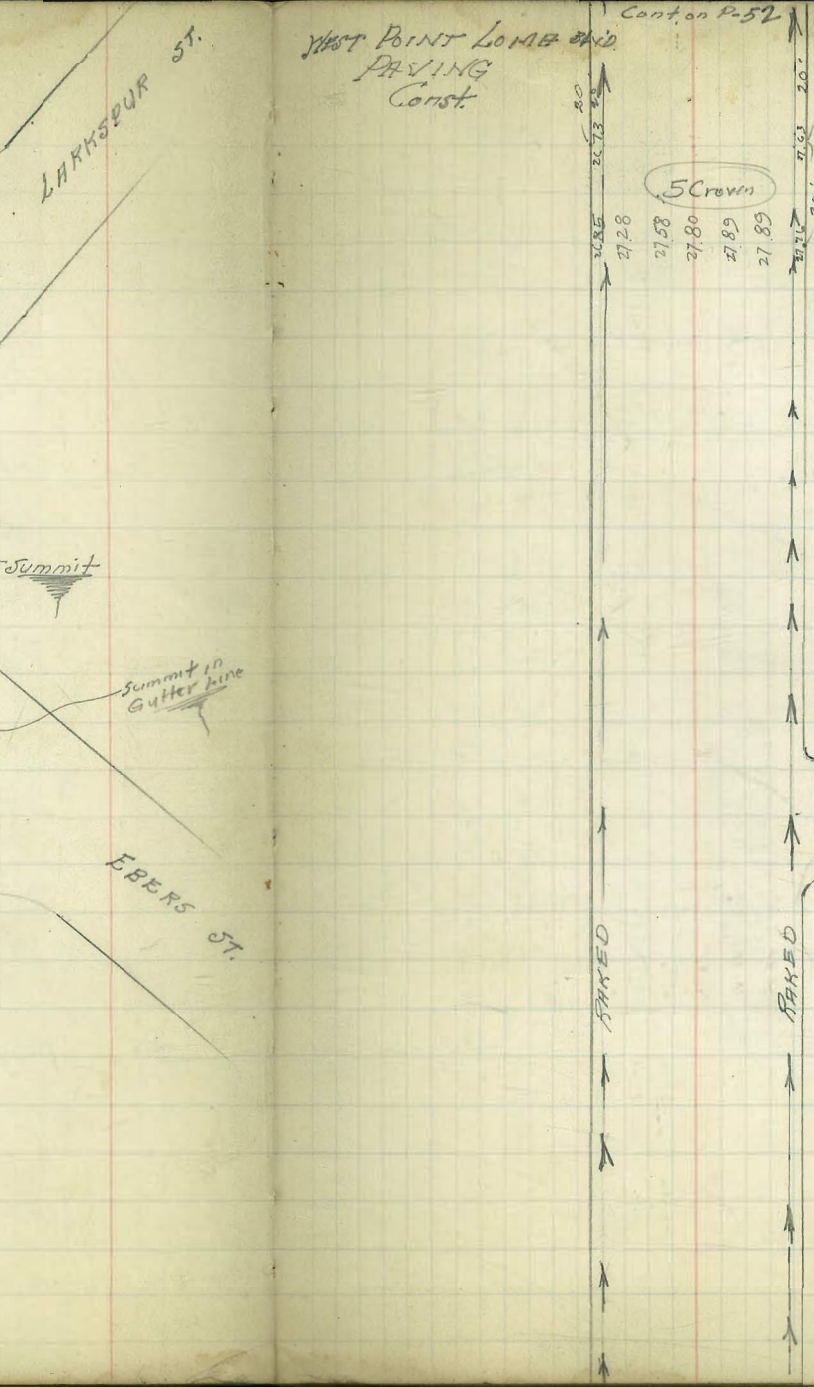
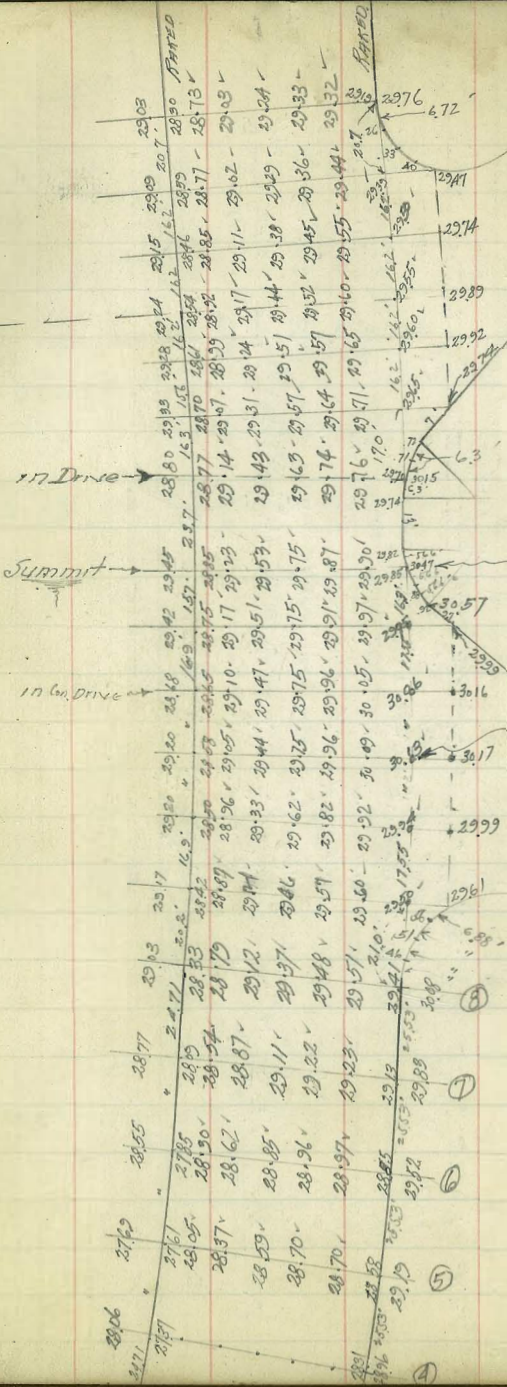
EBERS ST.

ALLEY

5 CROWN

RAISED

RAISED



11-7-30  
Carroll

Grades Hilley B.K. 56 Park Villas 15' wide

indexed  
c.s.k.

W. line - BM. S.E.  
Bright + Fulton

E. line

00 = s. line Landis

331.07	326.95	330.61
6.04		6.50
6.05	BM. NE	✓
	Bdy + Landis	

0+10 Brk E.

331.12	329.09	330.90 Brk
5.77	8.02	6.21
3.66		4.48
+2.33	337.11	+1.73

0+60

331.34	331.12
5.77	5.98
4.12	4.72
+1.15	+1.26

1+10

331.56	331.34
5.55	5.77
4.64	5.55
+0.91	+0.22

1+60

331.77	331.56
5.34	5.55
5.20	5.30
+0.14	+0.25

2+10

331.98	331.78
5.13	5.33
4.89	5.33
+0.24	0.00

2+60 Brk

332.20	332.00
4.91	5.11
3.94	4.92
0.97	+0.19

2+80 Brk

332.30	332.10
4.84	5.01
4.40	4.83
+0.41	+0.18

2+90 Brk

332.35	332.15
4.76	4.96
4.55	4.80
+0.21	+0.16

3+00 Brk

332.30	332.10
4.89	5.01
4.59	4.93
+0.22	+0.08

R.P. = 1254.7  
A = 9007

WEST POINT LOMA BLVD  
PAVING  
Const.

2737-44.00  
2711  
3068

32

N 70° 08' W P.C. Bk.

27.87	32.3	26.97	27.16	27.53	27.98	28.28	28.60	28.89	29.15	29.41
26.61	34.3	26.90	27.16	27.53	27.98	28.28	28.60	28.89	29.15	29.41
26.92	36.1	26.73	27.04	27.41	27.77	28.08	28.33	28.53	28.71	28.87
27.16	37.9	27.09	27.29	27.49	27.68	27.82	27.92	28.00	28.07	28.14
27.40	39.6	27.40	27.55	27.70	27.84	27.92	28.00	28.07	28.14	28.21
27.57	41.3	27.57	27.71	27.85	27.98	28.08	28.15	28.21	28.27	28.32
27.76	42.9	27.76	27.89	28.01	28.12	28.21	28.28	28.34	28.39	28.44
27.95	44.5	27.95	28.07	28.18	28.28	28.36	28.42	28.47	28.52	28.57
28.13	46.1	28.13	28.24	28.34	28.43	28.50	28.56	28.61	28.66	28.71
28.31	47.7	28.31	28.41	28.50	28.58	28.65	28.71	28.76	28.81	28.86
28.49	49.3	28.49	28.58	28.66	28.73	28.79	28.84	28.89	28.94	28.99
28.67	50.9	28.67	28.75	28.82	28.88	28.93	28.98	29.03	29.08	29.13
28.85	52.5	28.85	28.92	28.98	29.03	29.08	29.13	29.18	29.23	29.28
29.03	54.1	29.03	29.09	29.14	29.19	29.24	29.29	29.34	29.39	29.44
29.21	55.7	29.21	29.26	29.31	29.36	29.41	29.46	29.51	29.56	29.61
29.39	57.3	29.39	29.43	29.47	29.51	29.55	29.59	29.63	29.67	29.71
29.57	58.9	29.57	29.60	29.63	29.66	29.69	29.72	29.75	29.78	29.81
29.75	60.5	29.75	29.77	29.79	29.81	29.83	29.85	29.87	29.89	29.91
29.93	62.1	29.93	29.94	29.95	29.96	29.97	29.98	29.99	30.00	30.01

CASTELAR ST.

Cont from #50

R.P. = 1254.3  
A = 9007

R.C.  
S16°15'E

20.57	20.63	20.73	20.76	20.83	20.89	20.96	21.00	21.06	21.11	21.16
20.80	20.87	20.94	20.99	21.04	21.09	21.14	21.19	21.24	21.29	21.34
21.00	21.08	21.15	21.21	21.27	21.33	21.39	21.44	21.49	21.54	21.59
21.16	21.24	21.31	21.37	21.43	21.49	21.54	21.59	21.64	21.69	21.74
21.32	21.40	21.47	21.53	21.59	21.65	21.70	21.75	21.80	21.85	21.90
21.48	21.56	21.63	21.69	21.75	21.81	21.86	21.91	21.96	22.01	22.06
21.64	21.72	21.79	21.85	21.91	21.96	22.01	22.06	22.11	22.16	22.21
21.80	21.88	21.95	22.01	22.07	22.12	22.17	22.22	22.27	22.32	22.37
21.96	22.04	22.11	22.17	22.23	22.28	22.33	22.38	22.43	22.48	22.53
22.12	22.20	22.27	22.32	22.37	22.42	22.47	22.52	22.57	22.62	22.67
22.28	22.36	22.43	22.48	22.53	22.58	22.63	22.68	22.73	22.78	22.83
22.44	22.52	22.59	22.64	22.69	22.74	22.79	22.84	22.89	22.94	22.99
22.60	22.68	22.75	22.80	22.85	22.90	22.95	23.00	23.05	23.10	23.15
22.76	22.84	22.91	22.96	23.01	23.06	23.11	23.16	23.21	23.26	23.31
22.92	23.00	23.07	23.12	23.17	23.22	23.27	23.32	23.37	23.42	23.47
23.08	23.16	23.23	23.28	23.33	23.38	23.43	23.48	23.53	23.58	23.63
23.24	23.32	23.39	23.44	23.49	23.54	23.59	23.64	23.69	23.74	23.79
23.40	23.48	23.55	23.60	23.65	23.70	23.75	23.80	23.85	23.90	23.95
23.56	23.64	23.71	23.76	23.81	23.86	23.91	23.96	24.01	24.06	24.11
23.72	23.80	23.87	23.92	23.97	24.02	24.07	24.12	24.17	24.22	24.27
23.88	23.96	24.03	24.08	24.13	24.18	24.23	24.28	24.33	24.38	24.43
24.04	24.12	24.19	24.24	24.29	24.34	24.39	24.44	24.49	24.54	24.59
24.20	24.28	24.35	24.40	24.45	24.50	24.55	24.60	24.65	24.70	24.75
24.36	24.44	24.51	24.56	24.61	24.66	24.71	24.76	24.81	24.86	24.91
24.52	24.60	24.67	24.72	24.77	24.82	24.87	24.92	24.97	25.02	25.07
24.68	24.76	24.83	24.88	24.93	24.98	25.03	25.08	25.13	25.18	25.23
24.84	24.92	24.99	25.04	25.09	25.14	25.19	25.24	25.29	25.34	25.39
25.00	25.08	25.15	25.20	25.25	25.30	25.35	25.40	25.45	25.50	25.55
25.16	25.24	25.31	25.36	25.41	25.46	25.51	25.56	25.61	25.66	25.71
25.32	25.40	25.47	25.52	25.57	25.62	25.67	25.72	25.77	25.82	25.87
25.48	25.56	25.63	25.68	25.73	25.78	25.83	25.88	25.93	25.98	26.03
25.64	25.72	25.79	25.84	25.89	25.94	25.99	26.04	26.09	26.14	26.19
25.80	25.88	25.95	26.00	26.05	26.10	26.15	26.20	26.25	26.30	26.35
25.96	26.04	26.11	26.16	26.21	26.26	26.31	26.36	26.41	26.46	26.51
26.12	26.20	26.27	26.32	26.37	26.42	26.47	26.52	26.57	26.62	26.67
26.28	26.36	26.43	26.48	26.53	26.58	26.63	26.68	26.73	26.78	26.83
26.44	26.52	26.59	26.64	26.69	26.74	26.79	26.84	26.89	26.94	26.99
26.60	26.68	26.75	26.80	26.85	26.90	26.95	27.00	27.05	27.10	27.15
26.76	26.84	26.91	26.96	27.01	27.06	27.11	27.16	27.21	27.26	27.31
26.92	27.00	27.07	27.12	27.17	27.22	27.27	27.32	27.37	27.42	27.47
27.08	27.16	27.23	27.28	27.33	27.38	27.43	27.48	27.53	27.58	27.63
27.24	27.32	27.39	27.44	27.49	27.54	27.59	27.64	27.69	27.74	27.79
27.40	27.48	27.55	27.60	27.65	27.70	27.75	27.80	27.85	27.90	27.95
27.56	27.64	27.71	27.76	27.81	27.86	27.91	27.96	28.01	28.06	28.11
27.72	27.80	27.87	27.92	27.97	28.02	28.07	28.12	28.17	28.22	28.27
27.88	27.96	28.03	28.08	28.13	28.18	28.23	28.28	28.33	28.38	28.43
28.04	28.12	28.19	28.24	28.29	28.34	28.39	28.44	28.49	28.54	28.59
28.20	28.28	28.35	28.40	28.45	28.50	28.55	28.60	28.65	28.70	28.75
28.36	28.44	28.51	28.56	28.61	28.66	28.71	28.76	28.81	28.86	28.91
28.52	28.60	28.67	28.72	28.77	28.82	28.87	28.92	28.97	29.02	29.07
28.68	28.76	28.83	28.88	28.93	28.98	29.03	29.08	29.13	29.18	29.23
28.84	28.92	28.99	29.04	29.09	29.14	29.19	29.24	29.29	29.34	29.39
29.00	29.08	29.15	29.20	29.25	29.30	29.35	29.40	29.45	29.50	29.55
29.16	29.24	29.31	29.36	29.41	29.46	29.51	29.56	29.61	29.66	29.71
29.32	29.40	29.47	29.52	29.57	29.62	29.67	29.72	29.77	29.82	29.87
29.48	29.56	29.63	29.68	29.73	29.78	29.83	29.88	29.93	29.98	30.03
29.64	29.72	29.79	29.84	29.89	29.94	29.99	30.04	30.09	30.14	30.19
29.80	29.88	29.95	30.00	30.05	30.10	30.15	30.20	30.25	30.30	30.35
29.96	30.04	30.11	30.16	30.21	30.26	30.31	30.36	30.41	30.46	30.51
30.12	30.20	30.27	30.32	30.37	30.42	30.47	30.52	30.57	30.62	30.67
30.28	30.36	30.43	30.48	30.53	30.58	30.63	30.68	30.73	30.78	30.83
30.44	30.52	30.59	30.64	30.69	30.74	30.79	30.84	30.89	30.94	30.99
30.60	30.68	30.75	30.80	30.85	30.90	30.95	31.00	31.05	31.10	31.15
30.76	30.84	30.91	30.96	31.01	31.06	31.11	31.16	31.21	31.26	31.31
30.92	31.00	31.07	31.12	31.17	31.22	31.27	31.32	31.37	31.42	31.47
31.08	31.16	31.23	31.28	31.33	31.38	31.43	31.48	31.53	31.58	31.63
31.24	31.32	31.39	31.44	31.49	31.54	31.59	31.64	31.69	31.74	31.79
31.40	31.48	31.55	31.60	31.65	31.70	31.75	31.80	31.85	31.90	31.95
31.56	31.64	31.71	31.76	31.81	31.86	31.91	31.96	32.01	32.06	32.11
31.72	31.80	31.87	31.92	31.97	32.02	32.07	32.12	32.17	32.22	32.27
31.88	31.96	32.03	32.08	32.13	32.18	32.23	32.28	32.33	32.38	32.43
32.04	32.12	32.19	32.24	32.29	32.34	32.39	32.44	32.49	32.54	32.59
32.20	32.28	32.35	32.40	32.45	32.50	32.55	32.60	32.65	32.70	32.75
32.36	32.44	32.51	32.56	32.61	32.66	32.71	32.76	32.81	32.86	



Walker Indexed  
Bliss c.s.f.  
Dreht From  
Sommerger E.L. 8th to East of 9th St.  
12-27-30 (See Drawing No 4337-L)

N.L. Station	N.H. Grades	J.L. Stations E.L. 8th St.	J.L. Grades
= 0 + 00	282.00	= 0 + 00	282.00
+ 20	282.40	+ 20 = Bk in fact.	282.42
+ 60	283.20	+ 60	283.25
1 + 00 = Bk.	284.00	1 + 00	284.08
+ 20 = "	284.30	+ 20 = Bk.	284.50
+ 40 = "	284.40	+ 40 = Bk.	284.50
+ 75	284.21	+ 75	284.46
2 + 00 = beginning East. Cb.	284.07	2 + 10	284.42
+ 10 = Bk.	284.02	+ 60 = N.H. 9th	284.30
+ 60 = Bk.	283.50		
+ 80.5 = End East. Cb.	283.24		
3 + 10.0 = Δ in Cb. only.	282.86		
+ 30 = beginning 40' "	282.61	3 + 30 = E.L. 9th	283.00
+ 71	282.01	+ 71.65	282.44
4 + 12 = P.C. Return	281.41	4 + 13.5 = End of Work.	281.88
4 + 15 = at Prop. line	281.42		
4 + 36 = End diag. Cb.	281.06		

JEWEL LATERALS of Prop. Flow Line ✓

①	288.61	4.18	284.43	282.60	+ 1.83
②		4.86	283.75	279.10	+ 4.65
③	285.27	3.00	282.27	277.60	+ 4.67
④		3.20	282.07	276.90	+ 5.17
⑤		2.75	282.52	276.74	+ 5.78

284.39 = 8th S.E. top Hydt 8th & Washington, Book 1463-3

282.87-TP	282.00	282.40	283.60	284.00	284.30	284.40	284.21
286.61-X	7.36	7.53	6.33	5.29	5.63	5.59	5.72
287.94 = ch. 25 ch. East 1463-12	7.36	7.53	6.33	5.29	5.63	5.59	5.72
287.95	7.36	7.53	6.33	5.29	5.63	5.59	5.72
0.01 km. J.L.	7.36	7.53	6.33	5.29	5.63	5.59	5.72
284.02	283.50	283.25	284.08	284.50	284.50	284.46	
284.07	283.50	283.25	284.08	284.50	284.50	284.46	
284.42	284.02	283.50	283.24	282.86	282.61	282.01	
284.42	284.30	284.02	283.50	283.24	282.86	282.61	282.01
284.42	284.30	284.02	283.50	283.24	282.86	282.61	282.01
284.42	284.30	284.02	283.50	283.24	282.86	282.61	282.01
284.42	284.30	284.02	283.50	283.24	282.86	282.61	282.01

GRADES For diag. curb.

281.88	281.00	281.00
281.88	281.00	281.00
281.88	281.00	281.00
281.88	281.00	281.00
281.88	281.00	281.00

GRADES Culvert 279.09 259.00

279.09	259.00
279.09	259.00
279.09	259.00
279.09	259.00
279.09	259.00

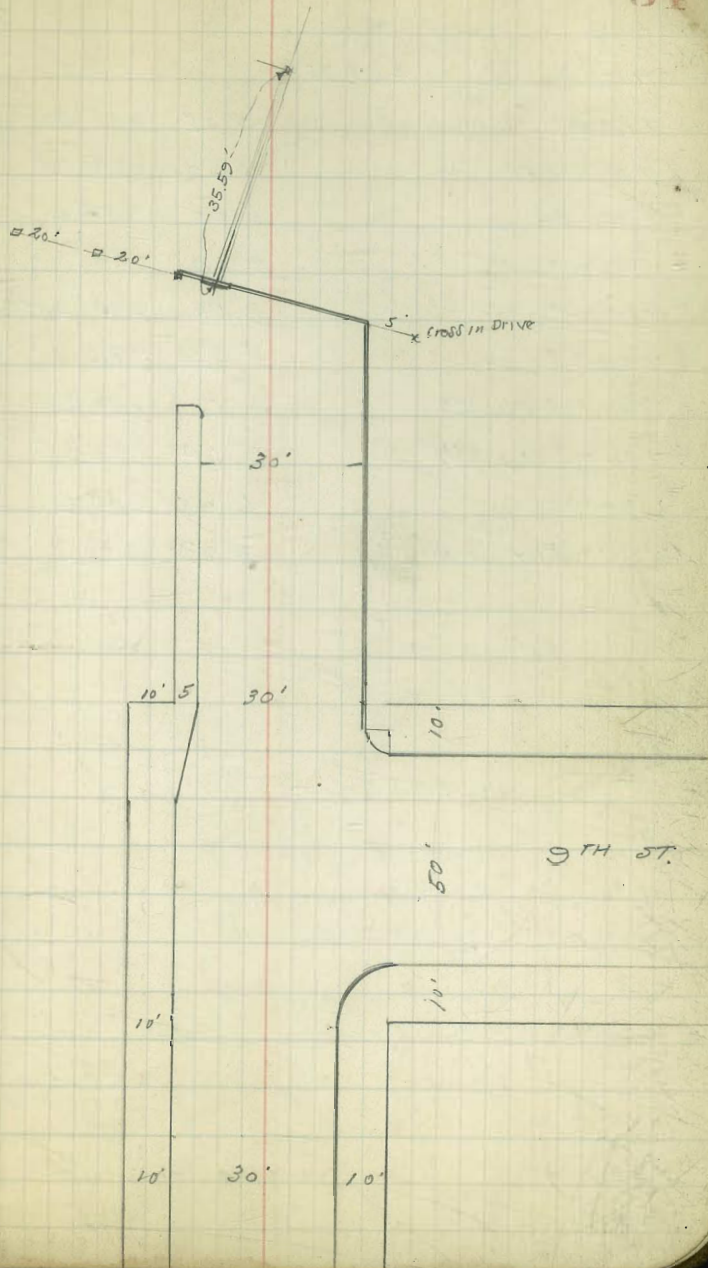
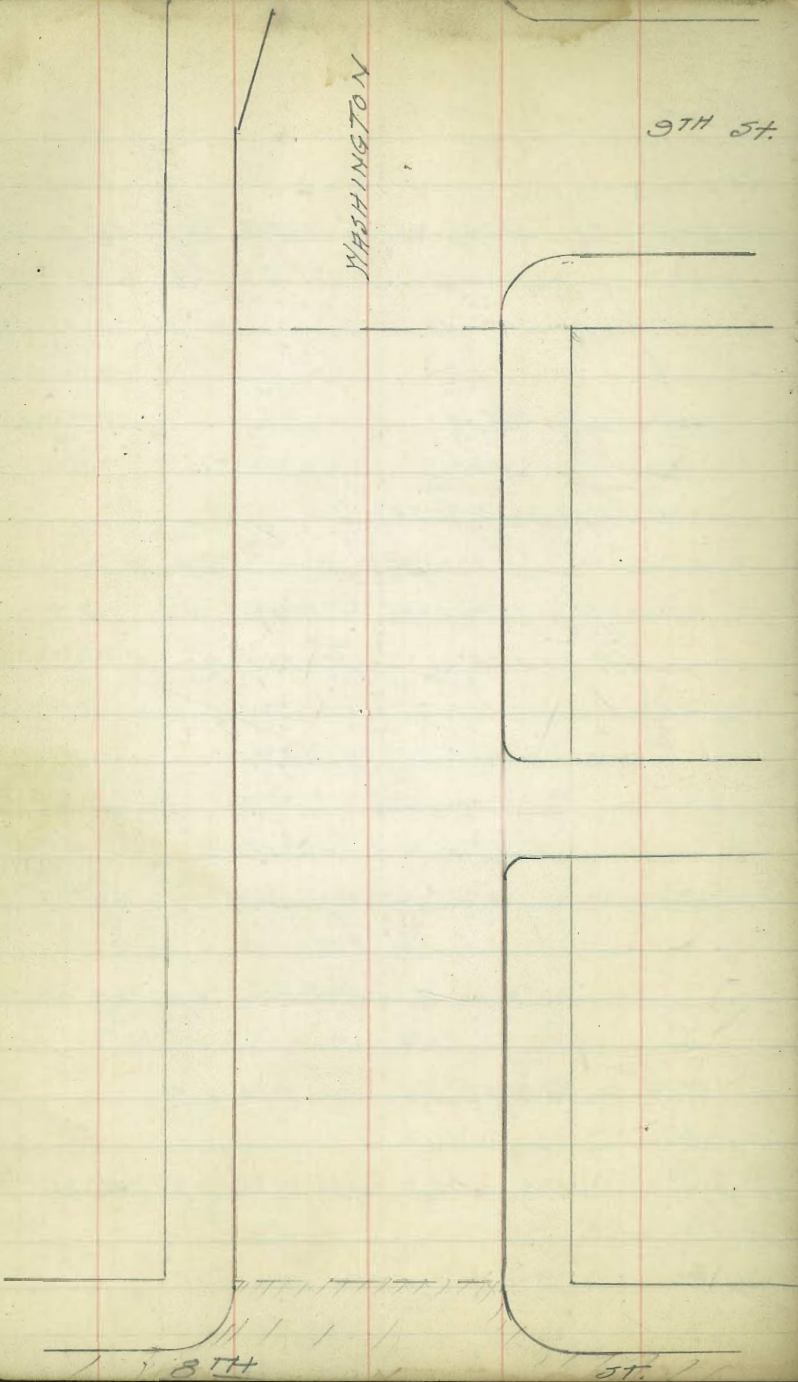
FINISH Curb stakes.

82.00	82.40	82.60	84.00	84.30	84.40	84.10
82.00	82.40	82.60	84.00	84.30	84.40	84.10
82.00	82.40	82.60	84.00	84.30	84.40	84.10
82.00	82.40	82.60	84.00	84.30	84.40	84.10
82.00	82.40	82.60	84.00	84.30	84.40	84.10

84.42	84.30	83.00	82.44	81.88
84.42	84.30	83.00	82.44	81.88
84.42	84.30	83.00	82.44	81.88
84.42	84.30	83.00	82.44	81.88
84.42	84.30	83.00	82.44	81.88

WASHINGTON

9TH ST.



Indexed  
C.S.K.

GRADES For 4" Water MAIN  
WASHINGTON ST.  
From 8th St. to 30' E. E.L. 9th St

Station  
E.L. 8th  
= 0+00

X  
287.95

Elev. Bottom  
of Pipe  
279.00

Cuts.

B.M. SE. top Hydt  
8th + Washington

55  
284.39  
3.56  
287.95  
5.01 -  
282.94 ✓

Chk SE. cb 9th

Station	X	Elev. Bottom of Pipe	Cuts.
+20	5.05	282.90	279.50 +3.40 ✓
1+00 = Bk.	3.60	284.35	281.20 +3.1 ✓
+20 = Bk	3.55	284.4	281.60 +2.8 ✓
+40 = "	3.70	284.25	281.60 +2.65 ✓
2+10 = "	3.50	284.45	281.50 +2.95 ✓
+40 = "	3.68	284.27	281.30 +3.0 ✓
+60 = " M.L. 9th	3.72	284.23	281.10 +3.1 ✓
3+30 = " E.L. 9th	5.10	282.85	280.0 +2.9 ✓
+50 = "	6.05	281.9	279.8 +2.1 ✓
4+20 = End of line	8.03	279.9	278.6 +1.3 ✓

TP

Walker indexed  
Bliss c.s.k.  
Diebert  
1-29-31

GRADING WATER MAIN  
MADISON AVE.

End exist 6" main Cherokee + Madison = 0+00	6.26	387.95	381.69	380.70	+2.9	Cuts. to bottom of ditch offsets
+50 = Bk.	4.34	383.61	380.70	380.3	+3.55	Left out 4' N. & ditch.
+1+00				380.3		
+5.92 = Δ = "Y"	5.00	382.95	379.4		+3.4	" " " "
2 value of Alley	5.45	382.50	379.1		+3.7	
2+00	5.75	382.20	378.5		+3.8	
+50	6.33	381.62	377.85		+3.8	
3+00 = Gate Valve	6.94	381.01	377.2		+3.2	
+50	7.50	380.45	377.0		+3.2	
+70.6 = Fire Hydr.	7.84	380.11	376.9		+3.2	
4+00	8.62	379.33	376.14		+3.1	
+50	10.01	377.94	374.84		+3.1	
5+03 = Tee to Alley	11.44	376.51	373.45			
T.P.	1.91	378.27	11.59	376.36		
2 Valve in Alley at 374 + 384	0.73	377.54	373.77		+2.85	
5+50	3.29	374.98	372.13		+2.8	
6+00	4.74	373.53	370.73		+3.13	
+50	5.81	372.46	369.33		+3.1	
6+75.5 = Bk. 2 Valve on N 8' West of ch. 384	6.52	371.75	368.60		+3.2	
2 Valve N.W. Madison 8' West of 384	7.88	370.39	367.20			
T.P.	2.23	376.26	4.24	374.03		
7+02.3 = Fire Hydr. 384 5' E.E.N.	4.77	371.49	368.1		+3.26	
+50	5.67	370.59	367.33		+3.4	
8+00	6.35	369.91	366.53			

277 2 poles  
in pole  
S.W. Madison 1904  
Grades 887 from 2' top

Book 1870-23

Cuts. to bottom of ditch

offsets

Left out 4' N. & ditch.

" " " "

+3.4

+3.7

+3.8

+3.8

+3.45

+3.2

+3.2

+3.1

+3.1

+3.67

+2.85

+2.8

+3.13

+3.1

+3.2

+3.4

+3.4

+3.26

+3.4

X  
376.26

MADISON AVE  
WATER MAIN

			GRADE	Cuts
			Bottom Ditch	Bottom Ditch
8+57.5 = 2 Gross	7.16	369.10	365.6	+3.5 ✓
2 Gate Valve N.W. Alley	8.00	368.26	365.6	+2.66
2+00	7.82	368.44	364.93	+3.5 ✓
+50	8.50	367.76	364.14	+3.6 ✓
10+22.9 = Gate Valve	2.35	366.91	363.0	+3.9 ✓
T.P. 5.41	373.45	8.22	368.04	370 + Madison
10+89.2 = 2 in. x 14 39th	7.02	366.43	363.1	+3.3 ✓
11+50	6.24	367.21	363.6	+3.6 ✓
12+00	5.84	367.61	364.02	+3.6 ✓
+50	5.37	368.08	364.45	+3.6 ✓
13+14.2 = 2 Gross for Alley	4.57	368.88	365.00	+3.9 ✓
2 Valve N.W. Alley	3.30	370.15	365.65	+4.5 ✓
2 Valve S.W. Alley	2.94	370.51	366.1	+4.4 ✓
13+50	4.55	368.90	365.32	+3.6 ✓
14+00	4.04	369.41	365.76	+3.65 ✓
+50	3.60	369.85	366.20	+3.65 ✓
+83.8 = Bit.	3.30	370.15	366.5	+3.65 ✓
15+18.7	3.10	370.35	366.4	+3.95 ✓
+53.6 = 2 Five Hgt. E.L. 40th	3.98	370.07	366.3	+3.8 ✓
16+00	4.17	369.28	365.58	+3.7 ✓
+50	4.96	368.49	364.8	+3.7 ✓
17+01.2 = Plug end.	5.82	367.63	364.0	+3.6 ✓
2 Valve N.W.	5.80	367.65	364.2	+3.5 ✓
2 Valve S.W.	4.65	368.80	365.1	+3.7 ✓
chk. N.W. 8th Box 1370-34	3.53	369.92	369.90	0.02 = FROM

MIKE  
81ms  
Dreber  
1-30-31

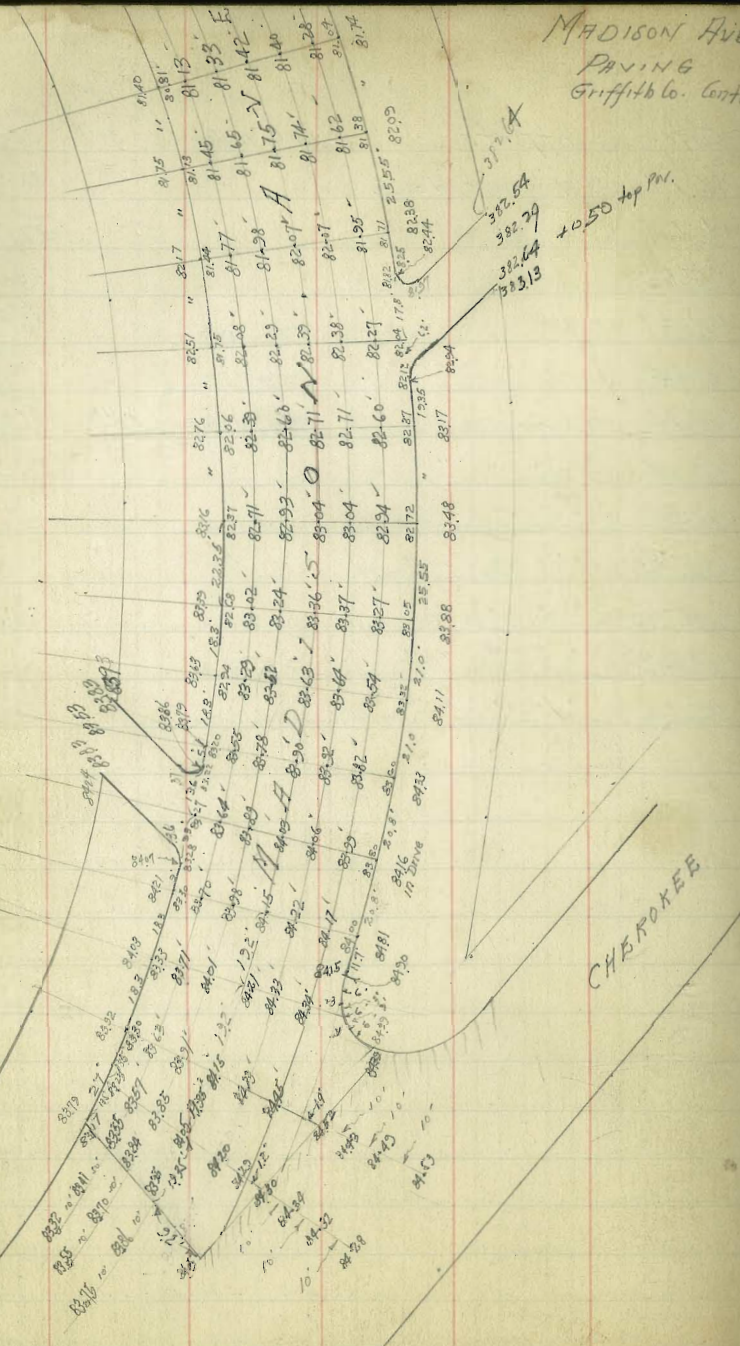
GRADES  
FOR JEWEL LATERALS  
MADISON AVE AND 40th St.

Griffin Co.  
Contr.

LAT. #	Grade	Flow/line	Grade	offsets
	387.11			
#1	2.94	384.17	378.00	+6.17 1 from end on E
" #2	6.53	380.58	373.90	+6.68 " " " " 1
" #3	7.90	379.21	373.60	+5.61 " " " " 1
" #4	380.25 2.58	377.67	373.30	+4.37 " " " " 1
" #5	372.95 3.11	369.84	362.60	+7.24 " " " " 1
" #6	372.94 3.30	369.64	364.20	+5.44 0.5 from end on E
" #7	7.60	365.34	357.20	+8.14 1 " " " "
" #8	5.62	367.32	361.00	+6.32 1 " " " "
" #9	4.35	368.59	363.00	+5.59 " " " " "
" #10	372.95 0.75	372.20	364.00	+8.20 " " " " "
" #11	372.95 1.66	371.29	364.00	+7.29 " " " " "
" #12	380.25 12.65	367.60	362.00	+5.60 " " " " "

180ms  
Nails in Pole 371 + 374 = 381.69  
542.7  
387.11 - X  
3.56 -  
377.55 = T.P.  
270.7  
380.25 = X  
12.65 -  
367.60 = T.P.  
5.35 +  
372.95 = X  
3.06 -  
N.Y. 8.P. Madison 40th 369.89 - T.P.  
3.05 -  
372.94 - X

Walker  
Bliss  
Debert  
1-30-31

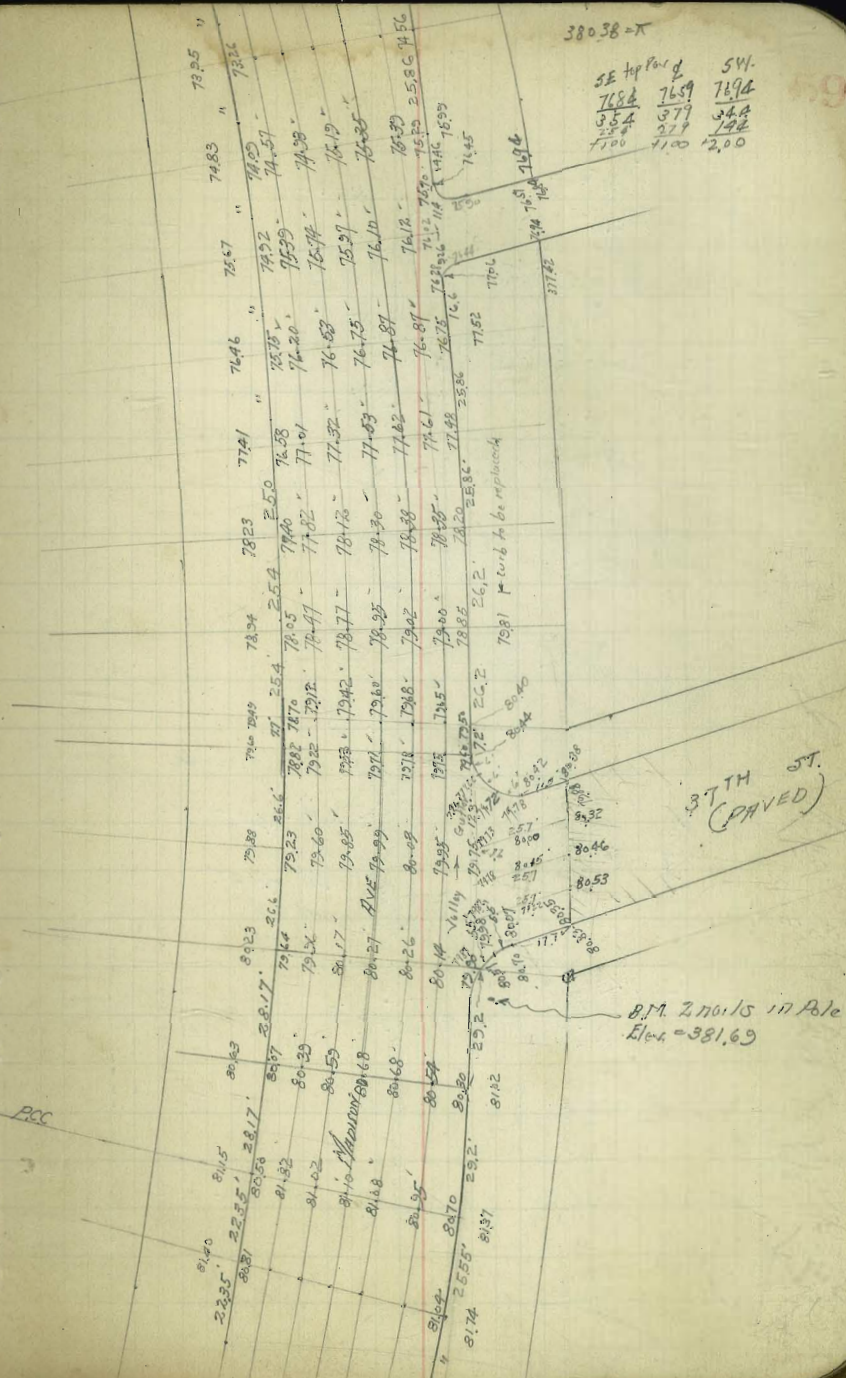


MADISON AVE  
PAVING  
Griffith Co. Contd.

CHEROKEE

38038-X

SE top of	SW
768.2	769
755.4	779
754	742
750	720



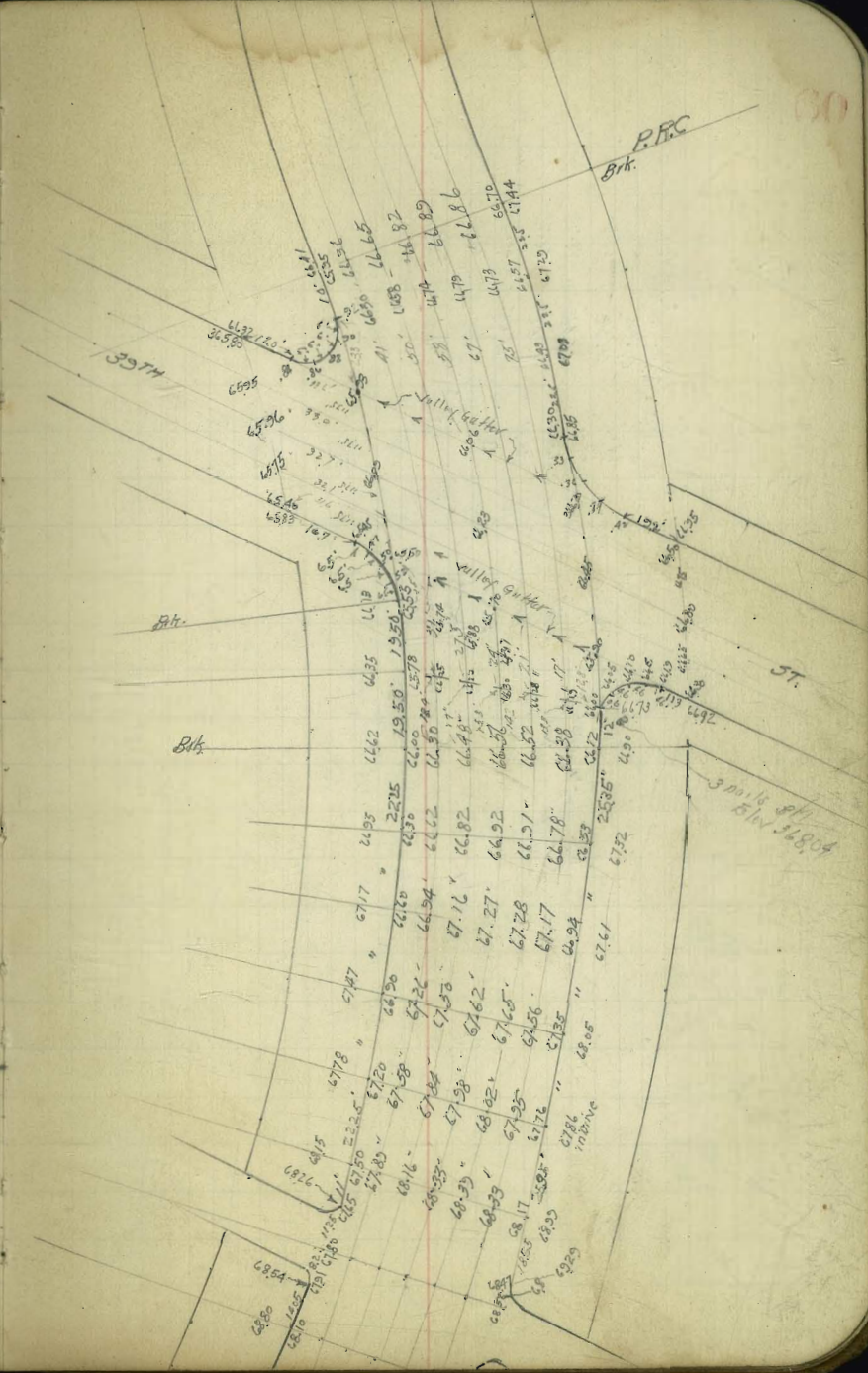
37TH ST.  
(PAVED)

817.27615 in Pole  
Elev = 381.69

38 PM

72.85	72.67	72.23	71.57	70.51	70.43	69.57	69.49	69.06	68.80	68.78	68.75	68.75
73.26	72.50	72.43	72.50	71.60	71.60	71.60	71.60	71.60	71.60	71.60	71.60	71.60
73.76	72.95	72.15	71.16	70.15	70.15	69.33	69.33	68.85	68.53	68.53	68.53	68.53
74.14	73.35	72.54	71.55	70.54	70.54	69.72	69.72	69.18	68.84	68.84	68.84	68.84
74.41	73.63	72.86	71.88	70.88	70.88	70.36	70.36	69.88	69.44	69.44	69.44	69.44
74.53	73.80	73.04	72.05	71.05	71.05	70.48	70.48	69.98	69.52	69.52	69.52	69.52
74.63	73.87	73.10	72.10	71.10	71.10	70.56	70.56	70.00	69.52	69.52	69.52	69.52
74.86	74.06	73.28	72.28	71.28	71.28	70.76	70.76	70.20	69.72	69.72	69.72	69.72
75.35	74.00	73.32	72.32	71.32	71.32	70.84	70.84	70.36	69.88	69.88	69.88	69.88

B.M. Nails 10 feet 374.03



P.R.C. Bk.

ST.

3 miles off NW 31804



3974

38898 W. W. 6873

6622	28.93	6722	6752	6835	6877	6945
6623	28.93	6723	6753	6836	6878	6946
6624	28.93	6724	6754	6837	6879	6947
6625	28.93	6725	6755	6838	6880	6948
6626	28.93	6726	6756	6839	6881	6949
6627	28.93	6727	6757	6840	6882	6950
6628	28.93	6728	6758	6841	6883	6951
6629	28.93	6729	6759	6842	6884	6952
6630	28.93	6730	6760	6843	6885	6953
6631	28.93	6731	6761	6844	6886	6954
6632	28.93	6732	6762	6845	6887	6955
6633	28.93	6733	6763	6846	6888	6956
6634	28.93	6734	6764	6847	6889	6957
6635	28.93	6735	6765	6848	6890	6958
6636	28.93	6736	6766	6849	6891	6959
6637	28.93	6737	6767	6850	6892	6960
6638	28.93	6738	6768	6851	6893	6961
6639	28.93	6739	6769	6852	6894	6962
6640	28.93	6740	6770	6853	6895	6963
6641	28.93	6741	6771	6854	6896	6964
6642	28.93	6742	6772	6855	6897	6965
6643	28.93	6743	6773	6856	6898	6966
6644	28.93	6744	6774	6857	6899	6967
6645	28.93	6745	6775	6858	6900	6968
6646	28.93	6746	6776	6859	6901	6969
6647	28.93	6747	6777	6860	6902	6970
6648	28.93	6748	6778	6861	6903	6971
6649	28.93	6749	6779	6862	6904	6972
6650	28.93	6750	6780	6863	6905	6973
6651	28.93	6751	6781	6864	6906	6974
6652	28.93	6752	6782	6865	6907	6975
6653	28.93	6753	6783	6866	6908	6976
6654	28.93	6754	6784	6867	6909	6977
6655	28.93	6755	6785	6868	6910	6978
6656	28.93	6756	6786	6869	6911	6979
6657	28.93	6757	6787	6870	6912	6980
6658	28.93	6758	6788	6871	6913	6981
6659	28.93	6759	6789	6872	6914	6982
6660	28.93	6760	6790	6873	6915	6983
6661	28.93	6761	6791	6874	6916	6984
6662	28.93	6762	6792	6875	6917	6985
6663	28.93	6763	6793	6876	6918	6986
6664	28.93	6764	6794	6877	6919	6987
6665	28.93	6765	6795	6878	6920	6988
6666	28.93	6766	6796	6879	6921	6989
6667	28.93	6767	6797	6880	6922	6990
6668	28.93	6768	6798	6881	6923	6991
6669	28.93	6769	6799	6882	6924	6992
6670	28.93	6770	6800	6883	6925	6993
6671	28.93	6771	6801	6884	6926	6994
6672	28.93	6772	6802	6885	6927	6995
6673	28.93	6773	6803	6886	6928	6996
6674	28.93	6774	6804	6887	6929	6997
6675	28.93	6775	6805	6888	6930	6998
6676	28.93	6776	6806	6889	6931	6999
6677	28.93	6777	6807	6890	6932	7000
6678	28.93	6778	6808	6891	6933	7001
6679	28.93	6779	6809	6892	6934	7002
6680	28.93	6780	6810	6893	6935	7003
6681	28.93	6781	6811	6894	6936	7004
6682	28.93	6782	6812	6895	6937	7005
6683	28.93	6783	6813	6896	6938	7006
6684	28.93	6784	6814	6897	6939	7007
6685	28.93	6785	6815	6898	6940	7008
6686	28.93	6786	6816	6899	6941	7009
6687	28.93	6787	6817	6900	6942	7010
6688	28.93	6788	6818	6901	6943	7011
6689	28.93	6789	6819	6902	6944	7012
6690	28.93	6790	6820	6903	6945	7013
6691	28.93	6791	6821	6904	6946	7014
6692	28.93	6792	6822	6905	6947	7015
6693	28.93	6793	6823	6906	6948	7016
6694	28.93	6794	6824	6907	6949	7017
6695	28.93	6795	6825	6908	6950	7018
6696	28.93	6796	6826	6909	6951	7019
6697	28.93	6797	6827	6910	6952	7020
6698	28.93	6798	6828	6911	6953	7021
6699	28.93	6799	6829	6912	6954	7022
6700	28.93	6800	6830	6913	6955	7023
6701	28.93	6801	6831	6914	6956	7024
6702	28.93	6802	6832	6915	6957	7025
6703	28.93	6803	6833	6916	6958	7026
6704	28.93	6804	6834	6917	6959	7027
6705	28.93	6805	6835	6918	6960	7028
6706	28.93	6806	6836	6919	6961	7029
6707	28.93	6807	6837	6920	6962	7030
6708	28.93	6808	6838	6921	6963	7031
6709	28.93	6809	6839	6922	6964	7032
6710	28.93	6810	6840	6923	6965	7033
6711	28.93	6811	6841	6924	6966	7034
6712	28.93	6812	6842	6925	6967	7035
6713	28.93	6813	6843	6926	6968	7036
6714	28.93	6814	6844	6927	6969	7037
6715	28.93	6815	6845	6928	6970	7038
6716	28.93	6816	6846	6929	6971	7039
6717	28.93	6817	6847	6930	6972	7040
6718	28.93	6818	6848	6931	6973	7041
6719	28.93	6819	6849	6932	6974	7042
6720	28.93	6820	6850	6933	6975	7043
6721	28.93	6821	6851	6934	6976	7044
6722	28.93	6822	6852	6935	6977	7045
6723	28.93	6823	6853	6936	6978	7046
6724	28.93	6824	6854	6937	6979	7047
6725	28.93	6825	6855	6938	6980	7048
6726	28.93	6826	6856	6939	6981	7049
6727	28.93	6827	6857	6940	6982	7050
6728	28.93	6828	6858	6941	6983	7051
6729	28.93	6829	6859	6942	6984	7052
6730	28.93	6830	6860	6943	6985	7053
6731	28.93	6831	6861	6944	6986	7054
6732	28.93	6832	6862	6945	6987	7055
6733	28.93	6833	6863	6946	6988	7056
6734	28.93	6834	6864	6947	6989	7057
6735	28.93	6835	6865	6948	6990	7058
6736	28.93	6836	6866	6949	6991	7059
6737	28.93	6837	6867	6950	6992	7060
6738	28.93	6838	6868	6951	6993	7061
6739	28.93	6839	6869	6952	6994	7062
6740	28.93	6840	6870	6953	6995	7063
6741	28.93	6841	6871	6954	6996	7064
6742	28.93	6842	6872	6955	6997	7065
6743	28.93	6843	6873	6956	6998	7066
6744	28.93	6844	6874	6957	6999	7067
6745	28.93	6845	6875	6958	7000	7068
6746	28.93	6846	6876	6959	7001	7069
6747	28.93	6847	6877	6960	7002	7070
6748	28.93	6848	6878	6961	7003	7071
6749	28.93	6849	6879	6962	7004	7072
6750	28.93	6850	6880	6963	7005	7073
6751	28.93	6851	6881	6964	7006	7074
6752	28.93	6852	6882	6965	7007	7075
6753	28.93	6853	6883	6966	7008	7076
6754	28.93	6854	6884	6967	7009	7077
6755	28.93	6855	6885	6968	7010	7078
6756	28.93	6856	6886	6969	7011	7079
6757	28.93	6857	6887	6970	7012	7080
6758	28.93	6858	6888	6971	7013	7081
6759	28.93	6859	6889	6972	7014	7082
6760	28.93	6860	6890	6973	7015	7083
6761	28.93	6861	6891	6974	7016	7084
6762	28.93	6862	6892	6975	7017	7085
6763	28.93	6863	6893	6976	7018	7086
6764	28.93	6864	6894	6977	7019	7087
6765	28.93	6865	6895	6978	7020	7088
6766	28.93	6866	6896	6979	7021	7089
6767	28.93	6867	6897	6980	7022	7090
6768	28.93	6868	6898	6981	7023	7091
6769	28.93	6869	6899	6982	7024	7092
6770	28.93	6870	6900	6983	7025	7093
6771	28.93	6871	6901	6984	7026	7094
6772	28.93	6872	6902	6985	7027	7095
6773	28.93	6873	6903	6986	7028	7096
6774	28.93	6874	6904	6987	7029	7097
6775	28.93	6875	6905	6988	7030	7098
6776	28.93	6876	6906	6989	7031	7099
6777	28.93	6877	6907	6990	7032	7100
6778	28.93	6878	6908	6991	7033	7101
6779	28.93	6879	6909	6992	7034	7102
6780	28.93	6880	6910	6993	7035	7103
6781	28.93	6881	6911	6994	7036	7104
6782	28.93	6882	6912	6995	7037	7105
6783	28.93	6883	6913	6996	7038	7106
6784	28.93	6884	6914	6997	7039	7107
6785	28.93	6885	6915	6998	7040	7108
6786	28.93	6886	6916	6999	7041	7109
6787	28.93	6887	6917	7000	7042	7110
6788	28.93	6888	6918	7001	7043	7111
6789	28.93	6889	6919	7002	7044	7112
6790	28.93	6890	6920	7003	7045	7113
6791	28.93	6891	6921	7004	7046	7114
6792	28.93	6892	6922	7005	7047	7115
6793	28.93	6893	6923	7006	7048	7116
6794	28.93	6894	6924	7007	7049	7117
6795	28.93	6895	6925	7008	7050	7118
6796	28.93	6896	6926	7009	7051	7119
6797	28.93	6897	6927	7010	7052	7120
6798	28.93	6898	6928	7011	7053	7121
6799	28.93	6899	6929	7012	7	







ROAD.

Yolker.  
Shss.  
Debut.  
2-13-31

64.21  
63.60  
63.88  
63.88  
63.76  
63.45  
63.99

PAVED

38TH

PAVED

15'

36401 - B.M. B.P.

WARD ROAD  
AND 38TH ST.  
POURING

MADISON AVE.

71.50 71.97

20.8'

72.25  
71.76  
72.29  
72.62  
72.78  
72.76  
73.30

38TH

24.8'

72.39  
72.9

B.M. (on East)

Ave.

69.25  
69.89  
70.21  
70.34  
70.82  
70.82

26'

70.52  
70.32  
70.61  
70.58  
70.58  
70.58

19.3

70.75

26'

71.29

15.1

71.20

MADISON

PAVED.

ST.

PAVED

71.29 71.29  
71.29 71.29  
71.29 71.29  
71.29 71.29  
71.29 71.29  
71.29 71.29

Grades in circles are for .3% Conv'n. Make to Grade in circles

71.97 72.25  
71.50 71.76

ST.

72.39

74.01

24.8

72.76  
73.30

Ave.

MONROE.

Indexed  
c.s.K.

YARD ROAD AND 38th St.  
CURB GRADES.

St. Yard Rd.	Curb Grade
= 0 + 00	364.30
+ 12 - Bk.	363.70
+ 30 "	362.90
+ 48 "	362.00
+ 60 "	361.40
+ 74.57 <sup>6467</sup> "	360.65
+ 89.62 <sup>6467</sup> " = End of Return.	359.45

End of Exist. cb see Plans

YARD ROAD N.E. cb. Grade	cb. Grade
= 0 + 00	363.94
+ 46.07	362.67
+ 92.15 = Bk.	361.40
+ 125.55	360.25
+ 58.95 = End of Work.	359.10

PCC on MADISON

J.E. Return YARD ROAD AND MADISON	Grade
①	383.70
②	383.63
③	383.56
④	383.34
⑤	383.02
⑥ - E.C. YARD Rd.	382.55

364.01 - 8.1701, 38th + Yard Rd.  
491.1  
368.92 = 7

Prop. A. Grade	Grade
364.30	362.70
362.90	362.00
361.40	360.65
360.00	360.00
7.52	8.97
3.44	5.57
+ 4.08	+ 2.7
	- 6.8

368.92 = 7

363.94	362.67	361.40	360.25	359.10
7.25	7.52	8.61	3.82	
5.25	6.24	2.10	2.11	
+ 0.3	- 0.7	- 0.43	+ 0.7	

382.90 = N.E. cb. YARD Rd.  
556.7  
388.95 = 7

383.70	383.63	383.56	383.34	383.02	382.55
4.75	4.82	4.89	5.11	5.43	5.90
	5.11				
	- 0.35				
382.90 = N.E. cb. Yard Rd.					
576.7					
388.66 = 7	383.70	383.63	383.56	383.34	383.02
	4.96	5.03	5.10	5.32	5.64
	5.63	6.31			6.11
	- 0.67	- 0.35			

R.E. - staked 4-1-31

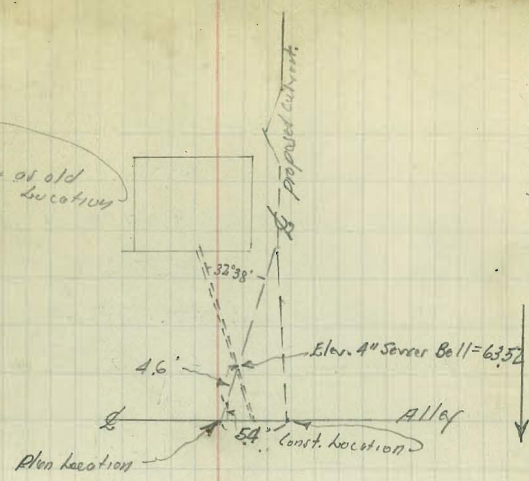
Walker  
Sigs  
Daint  
3-9-31

Alley Bk. 225, S.D. Land & Town  
Bet. Julian and IRVING Sts.  
From E.L. Dewey to W.H. EVANS.

Indexed  
C.S.K.

67

	Cut	Height #1	Elev.	Flow line	
1.7' south of #110 = 0+00	73.65	8.24	65.41	62.50	+2.91 ✓
0+20.79 = Δ Lt. 12°30'	70.51	5.59	64.92	62.37	+2.55 ✓
+46.79 = Δ Lt. 14°03'	69.42	4.95	64.47	62.20	+2.27 ✓
+57.09 = Δ Lt. 28°06'		5.17	64.25	62.14	+2.11 ✓
+67.39 = Δ Lt. 19°03'		4.99	64.43	62.07	+2.36 ✓
1+09.39		5.32	64.10	61.81	+2.29 ✓
1+51.39 = N. Julian.		6.75	62.67	61.53	+1.12 ✓
N.C. line Julian.		7.21	62.21	61.53	+0.68 ✓



73.65  
82.3  
65.42 = TD  
4.00 +  
69.42 = T

Exist. MH 250'	Grade	Const. in Above Alley	Flow	Cuts	offsets
E.L. Dewey = 0+00	71.40	7.24	64.16	64.00	+0.16
0+35		4.92	66.48	64.35	+2.05 ✓ 6' North.
+70 = 8th.		3.96	67.44	64.70	+2.74 ✓
1+06.67		1.97	69.43	65.80	+3.63 ✓
+43.34	82.23	10.26	71.97	66.90	+5.07 ✓
1+80 = E.D.M.H. = End New Const.		6.76	75.47	68.00	+7.47 ✓
			72.00		+3.47 ✓

65.06 = 1420  
56.64  
70.72 = T  
7.20  
63.52 = Ball on Sewer  
  
70.72  
5.31  
65.41 = 0+00 Draw.

Lot	GRADES FOR LATERALS Above Alley					
# 1	73.65	1.68	3.24	70.41	62.78	+7.63 ✓
# 2	82.23	1.27		80.96	75.71	+5.25 ✓

Walker  
8155  
Orbit  
3-9-31

GRADES  
For Alley 81k. 335 J.D. LAND TO TOWN Co. Add.  
Let Julian and Irving  
From El Dewey to H.H. Evans

Indexed  
c.s.k.

83

Station  
El Dewey  
= 0+00

N.H. Grades

SL  
GRADES

+20

66.80

66.40

+40

68.00

67.30

+60

68.50

68.40

+80

68.10

68.00

+100

67.10

67.10

+120

65.90

65.90

+140

65.10

65.10

+60 = F.V.C

65.20

65.20

2+05

65.60

65.60

+50 - P.V.C

66.00

66.00

+70

66.30

66.30

+90

66.70

66.70

3+10

67.30

67.30

+30

68.10

68.10

+50

69.10

69.10

+70

70.30

70.30

+90

71.60

71.60

4+10 = F.V.C

73.00

73.00

4+46.67

75.90

75.90

4+83.34

78.80

78.80

5+20 = P.V.C

81.70

81.70

+40

83.00

83.00

+60

84.00

84.00

+70

84.10

84.10

+80  
6+01.09 = H.H. Evans

83.90

83.90

Grades Same as South Side

↓

61.94 = NW 8P Dewey + Julian.

61.94	NH	6680	6800	6850	6810	6710	6590	6510	6510	6520
11.71										
73.65										
827	NH	685	565	515	555	655	775	855	541	531
654 LTP		681	503	527	434	641	675	755	488	464
200										
6392										
400										
6542	SL	6640	6720	6840	6800	6710	6590	6510	6510	6520
509		725	575	525	565	655	775	855	541	531
705		222	143	123	128	672	714	853	805	819
505										
6546	TP									
531	NH	6560	6600	6630	6670	6730	6810	6920	7030	
714		491	540	510	470	410	604	544	1193	
143										
6997	TP									
417	SL	6560	6600	6630	6670	6730	6810	6920	7030	
714		580	540	510	470	410	330	230	384	
417		585	572	410	320	310	230	230	284	
6997	TP									
126										
827	NH	7160	7300	7590	7880	8170	8300	8400	8410	
037		1063	923	633	842	552	422	322	512	
6186	TP									
536										
8722	S	7160	7300	7590	7880	8170	8300	8400	8410	
230		1063	923	633	842	552	422	322	512	
6492	TP									
273		1033	723	532	793	572	425	347	328	
8765	NH	8390	8270							
542										
8273	TP									
510										
8739	SL	8390	8270							
533										
8200										
204	RM									
004	Empr.									

+0.17  
-0.42  
+1.39  
+0.49  
-0.20

+0.78  
+0.44

+0.05  
-0.32  
+1.00  
+1.00  
+1.00  
+1.00  
+2.00  
+1.00

+0.40 use this.  
NW Julian + Evans  
this Empr. agrees with others (see Section Notes sheet 1277)



Walker Indexed  
Bliss c.s.K.  
Drebert  
3-10-31

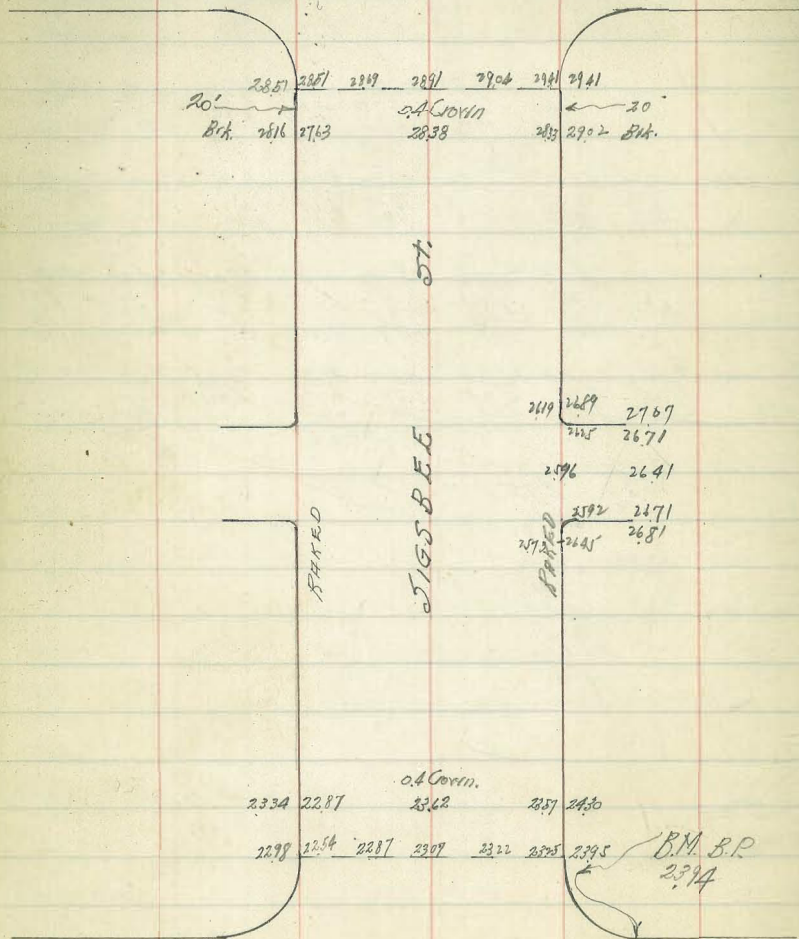
JIGSBEE ST.  
PAVING

Corral Centre.

69

LOGAN

AVE



NATIONAL

AVE.

Walker indexed  
Bliss c.s.k.  
Karnopp  
3-11-31

WATER MAIN Const.  
IN ALLEYS 72, 77-99-105 CITY HHS.  
Bet. 43RD AND VAN DYKE

From Jk. NIGHTMAN to Jk. THORN St.  
Grades for Bottom Ditch

10' S.E. Nightman  
= 0 - 30' = Exist. 6" Gross  
Jk. Nightman  
= 0 + 00

358.80	5.00	353.80	350.33	+3.5	
+60 = Bk.	5.20	353.60	350.13	+3.5	
1 + 00	6.15	352.65	349.45	+3.2	
+50	7.20	351.60	348.60	+3.0	
2 + 00	7.80	351.00	347.74	+3.3	
+50	8.70	350.10	346.89	+3.2	
3 + 00	9.13	349.67	346.09	+3.64	
+50	10.13	348.67	345.18	+3.5	
4 + 00	11.10	347.70	344.32	+3.4	
+50	12.20	346.60	343.47	+3.13	
5 + 00	347.19	1.45	345.74	342.61	+3.13
+50	1.80	345.39	341.76	+3.63	
+80 = Bk.	2.20	345.08	341.23	+3.8	
6 + 00 = Nk. Landis = Exist. 6" main	3.25	343.94	341.02	+2.9	

Jk. LANDIS  
= 0 + 00 = Exist. 6" Main

3.7	343.5	340.41	+3.1	
+40	4.11	343.02	339.89	+3.2
+80	4.25	342.94	339.37	+3.57
1 + 20	4.99	342.20	338.85	+3.35
+60 = Bk.	5.73	341.46	338.33	+3.13
2 + 00	6.04	341.15	337.93	+3.2
+40	6.56	340.63	337.54	+3.1
+80	6.83	340.36	337.14	+3.2
3 + 20	7.10	340.09	336.74	+3.35

N.W. & P. Nightman + 42nd

70  
352.57  
6.23 +  
358.80 x  
12.47 -  
346.33 79  
6.86 +  
347.19 -

	$\pi$			Elev. of Bottom of Pipe	
3+60	347.19	7.46	339.73	336.33	+3.4
4+00		7.69	339.50	335.93	+3.6
7+40		7.98	339.20	335.54	+3.7
7+80		8.50	338.69	335.14	+3.55
5+20 = Bk.	338.56	0.55	338.0	334.78	+3.2
+60		1.0	337.56	333.85	+3.7
6+00 = N.W. DWIGHT - Bk.		2.39	336.17	332.93	+3.24
+50 = 2" 6" C.I. Cross		2.78	335.78	333.00	+2.8
+80 = 5/8" DWIGHT.		2.12	336.44	333.03	+3.4
= 0+00		2.35	336.2	332.58	+3.6
+45		2.8	335.8	332.13	+3.7
+30		3.5	335.06	331.68	+3.4
1+35		4.19	334.57	331.23	+3.14
+80 = Bk.		4.87	333.7	330.61	+3.1
2+24		4.53	334.03	329.99	+4.04
+68		6.15	332.41	329.37	+3.1
3+12		6.50	332.06	328.75	+3.3
+56		7.02	331.54	328.13	+3.41
4+00 = Bk.		7.43	331.13	327.33	+3.8
+40		7.91	330.65	326.53	+4.1
+80		9.15	329.41	325.73	+3.7
5+20 = Bk.		0.83	328.65	324.13	+4.5
+60 = Bk.	329.48	4.16	325.37	320.83	+4.5
6+00 = " = N.W. MYRTLE		5.74	323.74	320.38	+3.36
+40		5.15	324.33	319.93	+4.4
+80 = 5/8" "		5.42	324.06	319.73	+4.3
= 0+00					

71

347.19 -  $\pi$   
 8.81 -  
 338.38 = T.P.  
 0.18 +  
 338.56 = T  
 16.10 -  
 328.46 = T.P.  
 1.02 +  
 329.48 =  $\pi$

Station	$\pi$		Elev.	Bottom Pipe	
	329.48				
0+80 = Bk. (4.17)3		6.57	312.91	319.53	+3.4
1+26.9		7.92	321.56	318.16	+3.4
173.32		9.02	320.46	316.79	+3.67
2+20 = Bk.		10.73	318.75	315.43	+3.32
+70		11.71	317.77	314.27	+3.5
3+20	317.12	0.7	316.4	313.10	+3.3
+70		1.58	315.54	311.94	+3.6
4+20		2.28	314.84	310.78	+4.1
+70		3.97	313.15	309.61	+3.54
5+20 = Bk.		5.80	311.32	308.45	+2.87
+70 = "		7.20	309.92	305.63	+4.3
6+00 = " N.W. Thorn St.		9.04	308.08	301.13	+6.95
+50 = 6" C.I. Cross		12.80	304.32	300.89	+3.5
+80 = S.W. Thorn = Gate Valve		11.96	305.16	300.53	+4.63
		13.10	304.02	303.50	+0.52 = cut to top of Proposed Curb.

N.W. 187 4200 J. M. York

**72**

$329.48 = \pi$   
 $13.10 -$   
 $316.38 = T.P.$   
 $0.74 +$   
 $317.12 = \pi$   
 $0.47 -$   
 $316.65 = T.P.$   
 $12.05 +$   
 $328.70 = \pi$   
 $7.00 -$   
 $321.70$   
 $321.62 = 8P.$   
 0.08 = diff.

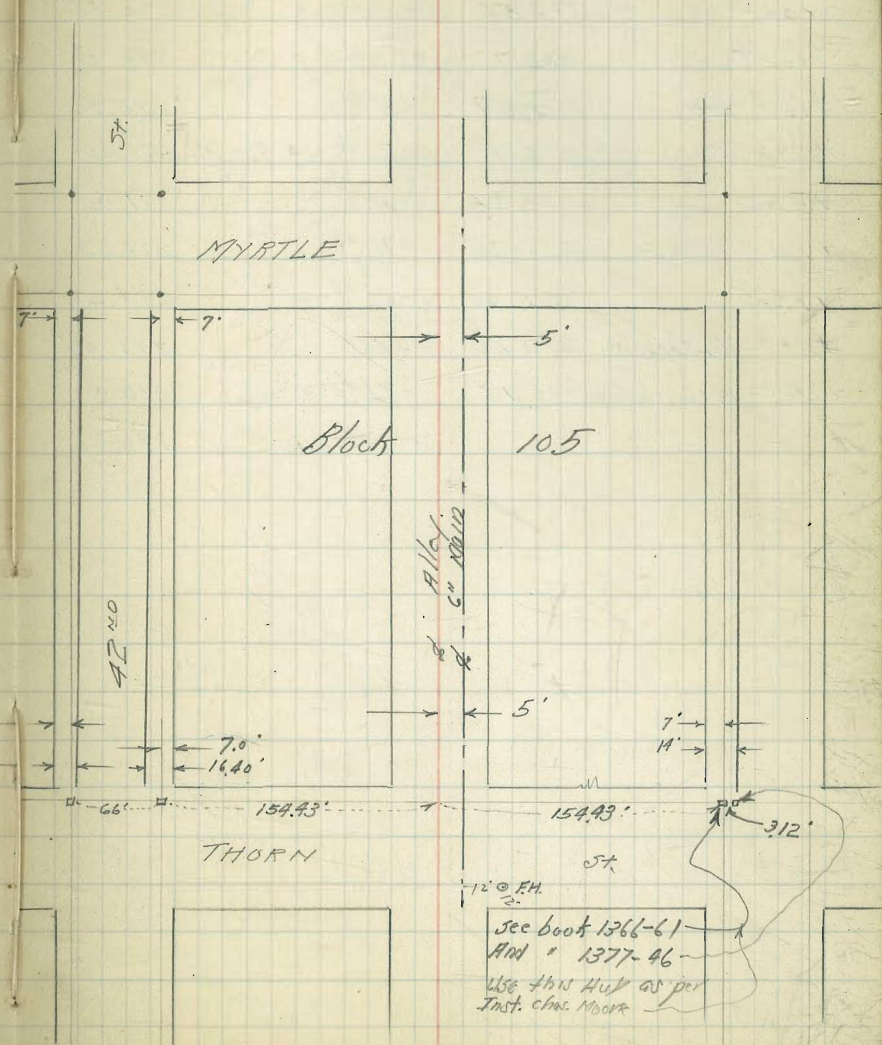
Walked  
Pls. &  
Drepan  
3-13-31

Indexed  
C.S.K.

Re-staked Alley B.K. 105  
City Hts.  
For Const. 6" Water Main.  
Location as per sketch on opp. Page

Station	X	-	Elev.	Grade Elev.	Cuts.
St. Myrtle =0+00	328.54	4.25	324.3	319.93	+4.4
+40		4.56	329.0	319.73	+4.3
+80 = Bk.		5.7	322.84	319.53	+3.3
+126.67		7.04	321.50	318.16	+3.34
+173.32		8.11	320.43	316.79	+3.64
2+20 = Bk.		9.78	318.76	315.43	+3.33
+70		10.91	317.63	314.27	+3.36
3+20		12.11	316.43	313.10	+3.33
+70	318.32	3.00	315.32	311.34	+3.4
4+20		3.53	314.8	310.78	+4.0 SE
+70		5.25	313.07	309.61	+3.46
5+20 = Bk.		7.03	311.79	308.45	+2.84
+70 = "		8.39	309.93	305.63	+4.3
6+00 = N.W. Thorn.		10.07	308.25	301.13	+7.12
+70 = Gross		14.08	304.24	300.83	+3.4
		13.03	305.29		
+80 = Gate Valve - S.W. Thorn = End Line		14.36	303.96	300.53	+4.76
Grade for Fire Hydr. - top curb			303.96	303.50	+0.46

N.W. CP 42.24 + Myrtle  
321.62 = 8P.  
6.92 +  
328.54 -  
12.11 -  
316.43 = TP  
7.89 +  
318.32 -



12° P.M.  
See book 1366-61  
And " 1377-46  
Use this Map as per  
Inst. Chas. Moore

Walker Indexed  
Bliss C.S.K.  
Drebert  
3-13-31  
N.Y. Station  
St. Lewis  
= 0+00

Alley PAVING BIK. 14  
MISSION HILLS.  
From St. Lewis st. to N.H. Stephens st.

	St. Grade	St. Station St. Lewis	St. Grade
	274.60	= 0+00	274.30
+9.8 - Bl.	274.40	+12.48 - Bl.	274.50
(66.57) 2			
0+16.47	273.55	+22.48 - " (36.47) 3	274.45
+83.14	272.70	0+59.15	273.59
1+19.8 - Bl.	271.85	+35.82	272.72
+39.8 - "	271.45	1+32.48 - Bl.	271.85
+59.8 - "	271.25	+52.48 - "	271.45
+70 - " = Δ Lt.	271.20	+72.48 - " 16.38	271.25
(47.95) 2			
2+17.25	271.00	1+89.46 - Δ (51.51) 2	271.20
+65.9 - N.H. Stephens	270.80	2+40.97	271.00
+75.9 - N.H. Stephens	270.77	+92.48 - N.H. Stephens	270.80
		3+02.98 - N.H. Stephens	270.27

266.05 = N.H. B.P. Ft. Jackson & Stephens F.B. 1866-71

270.6677	N	270.77	270.80	271.00	271.20	271.25	271.45
5.54		4.78	4.75	4.55	4.35	4.95	4.75
276.20		2.78	2.11	4.60	5.28	4.85	3.75
190			+0.64	-0.05	-0.73	+0.10	+1.00
273.30							
6.31	S	270.27	270.80	271.00	271.20	271.25	271.45
279.61		5.28	4.75	4.55	4.35	4.95	4.75
		5.29	+4.64	5.72	5.55	5.72	5.06
			+0.11	-1.17	-1.20	-0.82	-0.31
	N	271.85	272.70	273.55	274.40		274.60
		4.35	6.91	6.06	5.21		5.01
		3.35	5.81	4.73	4.45		4.95
		+1.00	+1.03	+1.33	+1.63		+0.06 High.
	S	271.85	272.72	273.59	274.45	274.50	274.30
		4.35	6.89	6.02	5.16	5.11	5.31
		4.08	6.93	5.65	5.15	5.32	5.33
		+0.77	-0.04	+0.57	+0.01	-0.11	+0.07 Low.

Walker indexed  
Bliss c.s.k.  
Dreibert  
3-28-31

YARD ROAD AND 38th St.  
6" WATER MAIN GRADES.

Elev Bottom  
PIPE.

Station					Cuts	Offsets
-10.7 W.E. & Madison -Exit 4" Gate Valve E.W. Madison = 0+00	383.78	0.44	383.34	379.90	+3.44	9' South
+50 (left out)				377.86		
1+00		4.20	379.58	375.82	+3.76	" "
+50		6.31	377.47	373.78	+3.7	" "
2+00		8.25	375.53	371.74	+3.8	" "
+50		10.42	373.36	369.70	+3.66	" "
3+00		12.56	371.22	367.66	+3.6	" "
+50	372.17	3.01	369.16	365.62	+3.54	" "
+87.6 = Blk.		4.70	367.47	364.10	+3.37	" "
4+54.3 = Blk.		7.17	365.00	361.50	+3.5	" "
5+04.3 = "		7.83	364.34	360.80	+3.54	" "
5+49.86 = Blk. = W.L. 38th		8.17	364.00	360.20	+3.8	11' "

WATER MAIN ON 38th

N.W. Madison						
= 0+00 = Exit Gate	372.79	2.03	370.76	367.20	+3.6	9' East
+45.1 = Blk		2.80	370.0	367.20	+2.8	" "
1+00		3.87	368.92	366.02	+2.9	" "
+50		4.84	367.95	364.94	+3.0	" "
2+00		5.94	366.85	363.86	+3.0	" "
+50		6.88	365.9	362.78	+3.1	" "
3+00		7.88	364.9	361.70	+3.2	" "
+34 = Blk = S.W. Ward Rd Produced east		8.59	364.2	361.00	+3.2	" "
+46 = Blk		8.83	363.96	359.30	+4.66	" "
+64 = "		9.06	363.73	359.80	+3.93	" "
+82 = "		11.17	361.62	358.90	+2.7	8' East.

Cont. on P-76

Elev. lat. #9 on Stake Page 76 = 373.87

75  
373.87  
373.17  
383.78 = X  
12.56 -  
371.22 = TR  
0.95 -  
372.17 = X  
818 -  
363.99  
364.01 = BM  
0.02 = Error

chk GEBP 38th St

Above BM = 364.01  
878 -  
372.79 = X

WARD ROAD AND 38th.  
SEWER LATERAL Grades

LAT. NO	+	-	Elev. stake	Flow line	Cuts.	offsets.	
" " 1	E.L. 38th	373.91	3.47	369.94	364.00	+5.94	
" " 2	E.L. "		7.02	366.39	361.00	+5.39	
" " 3	E.L. "		6.70	366.71	360.40	+6.31	
" " 4	E.L. "		6.40	367.01	360.50	+6.51	
" " 5	S.L. Ward Rd.	375.26	4.99	370.27	363.60	+6.67	
" " 6	N.L. "		4.56	370.78	365.70	+5.00	chk. man stake P-66
" " 7	S.L. "		1.74	373.52	367.80	+5.72	
" " 8	N.L. "		2.30	372.96	368.30	+4.66	
" " 9	S.L. "	385.18	5.31	379.87	374.30	+5.57	
" " 10	N.L. "		5.07	380.11	374.40	+5.71	
" " 11	S.L. "		6.84	378.34	372.80	+5.54	
" " 12	N.L. "	375.26	6.30	368.96	364.00	+4.96	

76  
 J.F. B.P. Stake 1+38th  
 364.01  
 9.40+  
 373.41 = T  
 341 -  
 364.00 +  
 11.26 +  
 375.26 = T  
 1.74 -  
 373.52 = TP  
 11.66 +  
 385.18 = X  
 7.12 -  
 383.07 = stake  
 383.02  
 0.05 = Error

38th St. SEWER Main cont from P-75

					Cuts	offsets.	
3+94 = Bk		372.79	12.01	360.78	358.3	+2.5	8' East. P.P. 16' East
4+24 = Δ 22 1/2° 145°		367.10	7.42	359.68	356.7	+3.0	" "
+43 = End of line			7.92	359.18	356.2	+3.0	6' South 43°

372.79  
 13.01 -  
 360.78 = TP  
 6.32 -  
 367.10 = X  
 3.09  
 364.01 ✓  
 ch. B.P.

GRADES For Sewer Main

IN E WARD ROAD Bet. Madison + 38th

					Cuts.	offsets	
NH#1		384.61	7.46	377.15	372.00	+5.15	5' N + 10' N
52' West = D.E.			5.25	379.36	373.50	+5.86	5' N

5 Elev. Stake Lat #9  
 > 379.87  
 4.74 +  
 384.61 = X







DIRECTIONS FOR USE OF TABLES

TABLE No. 1.

Distance of slope stake from side or shoulder stake for any width roadway, slope  $1\frac{1}{2}$  to 1. If ground is nearly level, the cut or fill at side stake is located by the double entry method in left column and top row. The number in body

from side stake to slope stake. If ground is not level, the side stake and slope stake, lower table, by this amount if cut, elevate if fill. Add this amount to cut or fill and place in table. Set up rod at this point, and line of sight should cut target. Instrument

**IMPROVED TABLES  
AND  
INFORMATION**

To find Tangent and External for curve of any other degree, divide by degree of curve and add correction found in column of corrections. Degree of curve with a given I may be found by dividing tangent (or external), opposite it by given tangent (or external). The distance from a point on the tangent to the curve is very nearly the square of the tangent length divided by twice the radius.

## DIRECTIONS FOR USE OF TABLES

TABLE No. 1.

Distance of slope stake from side or shoulder stake for any width roadway, slope  $1\frac{1}{2}$  to 1. If ground is nearly level, the cut or fill at side stake is located by the double entry method in left column and top row. The number in body of table in same row and column gives distance from side stake to slope stake. If ground is not level estimate the difference in elevation between the side stake and slope stake, lower target by this amount if cut, elevate if fill. Add this amount to cut or fill and find distance in table. Set up rod at this point, and line of sight should cut target. If it does not make the slight adjustment necessary.

TABLE No. 9.

To find Tangent and External for curve of any other degree, divide by degree of curve and add correction found in column of corrections.

Degree of curve with a given I may be found by dividing tangent, (or external), opposite I by given tangent, (or external).

The distance from a point on the tangent to the curve is very nearly the square of the tangent length divided by twice the radius.

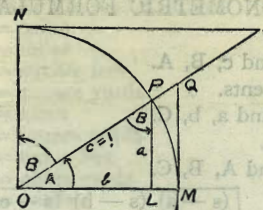


TABLE II  
TRIGONOMETRIC FORMULÆ.

$$\angle A = \angle MOP \quad \angle B = \angle PON = \angle OPL$$

$$R = OB = c = 1$$

$$\sin A = \frac{a}{c} = \frac{a}{1} = a = \cos B = LP$$

$$\cos A = \frac{b}{c} = \frac{b}{1} = b = \sin B = OL$$

$$\tan A = \frac{a}{b} = \frac{MQ}{OM} = \frac{MQ}{1} = MQ = \cot B = MQ$$

$$\cot A = \frac{NT}{ON} = \frac{NT}{1} = NT = \tan B = NT$$

$$\sec A = \frac{OQ}{OM} = \frac{OQ}{1} = OQ = \csc B = OQ$$

$$\csc A = \frac{OT}{ON} = \frac{OT}{1} = OT = \sec B = OT$$

$$\text{vers } A = \frac{LM}{OP} = LM = \text{covers } B \#$$

$$\text{covers } A = \frac{OP - LP}{OP} = OP - LP = \text{vers } B$$

$$\text{exsec } A = PQ = \text{coexsec } B$$

$$\text{coexsec } A = PT = \text{exsec } B$$

$$\sin \frac{1}{2} A = \sqrt{\frac{1 - \cos A}{2}} \quad \cos \frac{1}{2} A = \sqrt{\frac{1 + \cos A}{2}}$$

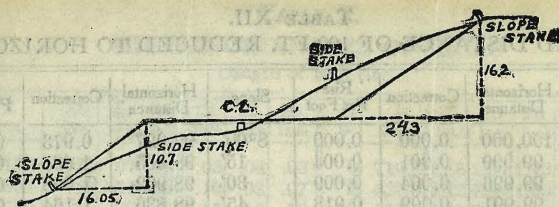
$$\sin 2A = 2 \sin A \cos A \quad \cos 2A = \cos^2 A - \sin^2 A$$

$$\text{Law of Sines} \quad \frac{\sin A}{a} = \frac{\sin B}{B} = \frac{\sin C}{C}$$

$$\text{Law of Cosines} \quad c^2 = a^2 + b^2 - 2ab \cos C$$

$$\text{Law of Tangents} \quad \frac{a+b}{a-b} = \frac{\tan \frac{1}{2}(A+B)}{\tan \frac{1}{2}(A-B)}$$





**DISTANCES FROM SIDE STAKES FOR CROSS-SECTIONING.**

SLOPE 1 1/2 TO 1. ROADWAY OF ANY WIDTH.

	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	
0	0 00	0 15	0 30	0 45	0 60	0 75	0 90	1 05	1 20	1 35	0
1	1 50	1 65	1 80	1 95	2 10	2 25	2 40	2 55	2 70	2 85	1
2	3 00	3 15	3 30	3 45	3 60	3 75	3 90	4 05	4 20	4 35	2
3	4 50	4 65	4 80	4 95	5 10	5 25	5 40	5 55	5 70	5 85	3
4	6 00	6 15	6 30	6 45	6 60	6 75	6 90	7 05	7 20	7 35	4
5	7 50	7 65	7 80	7 95	8 10	8 25	8 40	8 55	8 70	8 85	5
6	9 00	9 15	9 30	9 45	9 60	9 75	9 90	10 05	10 20	10 35	6
7	10 50	10 65	10 80	10 95	11 10	11 25	11 40	11 55	11 70	11 85	7
8	12 00	12 15	12 30	12 45	12 60	12 75	12 90	13 05	13 20	13 35	8
9	13 50	13 65	13 80	13 95	14 10	14 25	14 40	14 55	14 70	14 85	9
10	15 00	15 15	15 30	15 45	15 60	15 75	15 90	16 05	16 20	16 35	10
11	16 50	16 65	16 80	16 95	17 10	17 25	17 40	17 55	17 70	17 85	11
12	18 00	18 15	18 30	18 45	18 60	18 75	18 90	19 05	19 20	19 35	12
13	19 50	19 65	19 80	19 95	20 10	20 25	20 40	20 55	20 70	20 85	13
14	21 00	21 15	21 30	21 45	21 60	21 75	21 90	22 05	22 20	22 35	14
15	22 50	22 65	22 80	22 95	23 10	23 25	23 40	23 55	23 70	23 85	15
16	24 00	24 15	24 30	24 45	24 60	24 75	24 90	25 05	25 20	25 35	16
17	25 50	25 65	25 80	25 95	26 10	26 25	26 40	26 55	26 70	26 85	17
18	27 00	27 15	27 30	27 45	27 60	27 75	27 90	28 05	28 20	28 35	18
19	28 50	28 65	28 80	28 95	29 10	29 25	29 40	29 55	29 70	29 85	19
20	30 00	30 15	30 30	30 45	30 60	30 75	30 90	31 05	31 20	31 35	20
21	31 50	31 65	31 80	31 95	32 10	32 25	32 40	32 55	32 70	32 85	21
22	33 00	33 15	33 30	33 45	33 60	33 75	33 90	34 05	34 20	34 35	22
23	34 50	34 65	34 80	34 95	35 10	35 25	35 40	35 55	35 70	35 85	23
24	36 00	36 15	36 30	36 45	36 60	36 75	36 90	37 05	37 20	37 35	24
25	37 50	37 65	37 80	37 95	38 10	38 25	38 40	38 55	38 70	38 85	25
26	39 00	39 15	39 30	39 45	39 60	39 75	39 90	40 05	40 20	40 35	26
27	40 50	40 65	40 80	40 95	41 10	41 25	41 40	41 55	41 70	41 85	27
28	42 00	42 15	42 30	42 45	42 60	42 75	42 90	43 05	43 20	43 35	28
29	43 50	43 65	43 80	43 95	44 10	44 25	44 40	44 55	44 70	44 85	29
30	45 00	45 15	45 30	45 45	45 60	45 75	45 90	46 05	46 20	46 35	30
31	46 50	46 65	46 80	46 95	47 10	47 25	47 40	47 55	47 70	47 85	31
32	48 00	48 15	48 30	48 45	48 60	48 75	48 90	49 05	49 20	49 35	32
33	49 50	49 65	49 80	49 95	50 10	50 25	50 40	50 55	50 70	50 85	33
34	51 00	51 15	51 30	51 45	51 60	51 75	51 90	52 05	52 20	52 35	34
35	52 50	52 65	52 80	52 95	53 10	53 25	53 40	53 55	53 70	53 85	35
36	54 00	54 15	54 30	54 45	54 60	54 75	54 90	55 05	55 20	55 35	36
37	55 50	55 65	55 80	55 95	56 10	56 25	56 40	56 55	56 70	56 85	37
38	57 00	57 15	57 30	57 45	57 60	57 75	57 90	58 05	58 20	58 35	38
39	58 50	58 65	58 80	58 95	59 10	59 25	59 40	59 55	59 70	59 85	39
40	60 00	60 15	60 30	60 45	60 60	60 75	60 90	61 05	61 20	61 35	40
41	61 50	61 65	61 80	61 95	62 10	62 25	62 40	62 55	62 70	62 85	41
42	63 00	63 15	63 30	63 45	63 60	63 75	63 90	64 05	64 20	64 35	42
43	64 50	64 65	64 80	64 95	65 10	65 25	65 40	65 55	65 70	65 85	43
44	66 00	66 15	66 30	66 45	66 60	66 75	66 90	67 05	67 20	67 35	44
45	67 50	67 65	67 80	67 95	68 10	68 25	68 40	68 55	68 70	68 85	45
46	69 00	69 15	69 30	69 45	69 60	69 75	69 90	70 05	70 20	70 35	46
47	70 50	70 65	70 80	70 95	71 10	71 25	71 40	71 55	71 70	71 85	47
48	72 00	72 15	72 30	72 45	72 60	72 75	72 90	73 05	73 20	73 35	48
49	73 50	73 65	73 80	73 95	74 10	74 25	74 40	74 55	74 70	74 85	49
50	75 00	75 15	75 30	75 45	75 60	75 75	75 90	76 05	76 20	76 35	50

Computed by L. Leland Locke.

4.4  
676.20  
7.85  
11.75  
19.60  
31.35

6 26  
.43

4 1.74  
44

418  
42

64  
46  
11.8  
3

60  
6.35  
53.65

125  
53.65  
72.35

31.5  
10.5

284  
20  
315

692  
6360  
632

26.75

10.65  
20.31  
14.97

52  
87  
26.1